

Reconfiguring urban adaptation finance

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This paper examines international, national and municipal mechanisms for financing adaptation, and reveals the systemic barriers that prevent money being channelled into the hands of low-income and highly vulnerable urban residents in low- and middle-income countries, and hinder effective urban adaptation. At the same time, a number of highly organised, pro-poor, locally managed funds are being pioneered across a number of cities in low- and middle-income countries. Bottom-up planning and decision-making is emerging as a potential complement to the ineffective top-down financing models, and offers a viable approach to bridge the gap between low-income urban residents and the agencies that claim to support them.

Contents

Summary	4	3.4 Community-driven finance mechanisms: Nepal	20
1 Risks faced by low-income urban residents	6	3.5 Community-driven finance mechanisms: Myanmar	21
2 Global to local financing architecture	9	4 The gap between top-down and bottom-up finance	23
2.1 Official development assistance (ODA)	9	4.1 International funding mechanisms are inadequate	23
2.2 Funds under the United Nations Framework Convention on Climate Change (UNFCCC)	10	4.2 Lack of accountability in funds to beneficiaries	24
2.3 World Bank climate investment funds: Pilot Program for Climate Resilience (PPCR)	13	4.3 Local and urban actors are unable to access funds	24
2.4 National financing mechanisms for financing adaptation: Rwanda and Bangladesh	13	5 Bridging the gap: the way forward	26
2.5 Issues around municipal spending	14	5.1 Support climate change adaptation on the ground	26
3 How can local funds reduce risk?	16	5.2 Recalibrate funding to the urban and local scale	27
3.1 Local financing mechanisms that can contribute to adaptation	16	5.3 Focus on the performance of funds	27
3.2 Taking local funds to scale	17	5.4 Encourage private investment	28
3.3 Community-driven finance mechanisms: Malawi	19	References	29

Summary

Climate change funders and practitioners often lack sufficient knowledge to ensure that funds and practices meet the needs of low-income urban residents; and urban practitioners have not yet gained sufficient climate change-related funds to access and apply these in low-income and informal settlements. The following working paper seeks to address this knowledge gap, and offers new insights into how to overcome it.

A multi-level study of the design and governance of climate finance that links the international, national and local levels, the paper explains the relative benefits of different financing modalities for reducing the vulnerability of the urban poor. It scrutinises the mechanisms for climate change adaptation finance at various scales, from the international to the local, as well as the degree to which the various funds are currently meeting the needs of cities in low- and middle-income countries, and in particular their low-income residents.

The paper further suggests that the international financing architecture, as well as that at the national and sub-national levels, is currently ineffective and lacking in accountability to the urban poor. As such, a modification in the design of these funds is required to more closely meet the needs of low-income and highly vulnerable urban residents across the global South. Locally-managed funds are identified as a potential route forward, because working with organised communities and representative groups can help remove systemic barriers, as well as more accurately identify the needs of slum dwellers, and enable pro-poor development and adaptation.

Allocating funding to support adaptation to climate change has become a major agenda item in international climate policy, within the formal structures of the UN Framework Convention on Climate Change (UNFCCC) and among national, international, and non-governmental stakeholders. Many international funds support adaptation measures: the Least Developed Countries Fund (LDCF), the Special Climate Change

Fund (SCCF), and the Adaptation Fund (AF) fall within the UNFCCC, and the World Bank administers the Pilot Program for Climate Resilience (PPCR).

Each financing mechanism has its own fiduciary standards and governance architecture. These funds each come with their own processes and obligations, which can easily lead to confusion. In addition, the money flowing through the official channels is modest compared to the scale of adaptation needed; and the requirement for 'new and additional' money for adaptation on top of Official Development Assistance further muddles the picture.

Typically, the lion's share of climate finance is funnelled through national governments, and adequate funds do not appear to be reaching city and local governments – much less the residents of low-income areas. National governments lack a thorough understanding of local issues and needs, and the urban poor remain on the periphery of deliberations on adaptation measures because of the often informal nature of their communities and unclear tenure arrangements.

This leads to a degree of invisibility and lack of effective engagement in formal planning processes, which includes those that contribute to adaptation. Additionally, discussions are continuing over how to give national and sub-national governments or civil society organisations 'direct access' to these funds. Moreover, even where national governments have access it is not always clear that this takes into account the particular vulnerabilities of different communities (including low-income urban settlements).

At the same time, a number of community-driven finance mechanisms have emerged that offer an alternative route to financing urban development through participatory governance and accessibility, which are already delivering concrete change. Global organisations such as Slum/Shack Dwellers International (SDI) and the Asian Coalition for Housing Rights (ACHR) are managing organised networks of the urban poor. These mechanisms have yet to be applied systematically to a climate change adaptation agenda, but as this paper discusses they offer clear avenues for building resilience.

Top-down approaches have not offered effective adaptation for slum dwellers, so communities have created their own financing systems based on community savings groups. Households collectively pool their resources into shared funds that can be used to provide quick, easy and accountable loans and grants for a variety of small projects, which include housing improvements and income generation investments.

Savings groups grow and form federations by linking with other similar groups. To propagate their savings, federations have created urban poor funds at the city and national levels. These funds consolidate savings in a revolving fund that provides loans to communities for a range of development projects. Thus, community savings have in effect been transformed into a self-sustaining city-wide financing mechanism for supporting community-driven projects.

Communities are increasingly working together, which has brought about a transition from a welfare approach to participatory governance. As the funds have grown, the federations have augmented their financial and political clout, which allows urban poor communities to negotiate more funds from governments and international aid agencies, thereby scaling up efforts and creating new links that did not exist before.

These arrangements position low-income urban residents as significant agents of change who can also manage climate adaptation effectively: they have an intimate understanding of, and ability to identify and reduce, risks. These international and supranational organisations of the urban poor have channelled significant sums of money to low-income urban areas and are simultaneously offering autonomous decision-making authority and accountability to residents.

Large centralised bodies such as the World Bank, and the management organisations of the UNFCCC funds were not designed to work with local urban stakeholders. However, this incompatibility in scale can be tackled by working with multi-level representative networks such as SDI and ACHR. This may, however, mean reversing the current working archetype from a focus on stand-alone *projects* and outputs to an approach where international agencies fund local *processes* that contribute to adaptation and resilience.

As a starting point for thinking about building resilience to climate change among the most marginalised in urban areas, the paper concludes with a number of issues that must be included in any future discussion, and offers parameters for a more effective future model of adaptation financing for the urban poor.

1

Risks faced by low-income urban residents

In cities across the globe, people are increasingly aware that adaptation to the adverse impacts of climate change is becoming critical, particularly for low-income and other marginalised groups (Carmin et al 2012, p3). Urban centres in low- and middle-income countries concentrate a large share of those most at risk from the effects of severe weather associated with climate change; lives, assets, environmental quality and future prosperity are becoming increasingly vulnerable to the adverse impacts (Moser et al 2010, p vii and 1). Yet, the framing of the climate change adaptation policy debate is frequently rural, and the impacts on the urban poor are overlooked.

Cities and city dwellers have received too little attention in discussions of climate change impacts and adaptation, especially in relation to financing. However, given the concentration of population, the considerable private and public investment in public services in cities that can be damaged by extreme weather events, and the actual settlement patterns, the impact on the urban poor will be significant (Feiden 2011, p3). The direct and indirect impacts of climate change, particularly related to the increasing frequency and intensity of extreme weather events, pose a major threat to the lives and livelihoods of current slum dwellers (Table 1).

Unplanned urbanisation in the absence of rigorous urban planning and management systems also means that the geography of exposure is rapidly expanding

as more informal settlements and slums concentrate in hazard-prone areas (Schensul and Dodman 2013). Such patterns are prevalent across Africa, Asia and Latin America (Douglas et al 2013, Brown et al 2012 and IFRC 2010). In addition to these direct impacts, climate change has the potential to exacerbate many of the existing challenges that low-income urban residents face, including altering the conditions in which vector- and water-borne diseases are transmitted, and negatively affecting the availability and price of food supplies (Tacoli 2013).

Low-income groups are likely to be disproportionately affected by the impacts of climate change, mainly because they live and work in underserved or unserved informal settlements and slums in hazard-prone areas (Wilbanks et al 2007 and also Hardoy and Pandiella 2009). Their vulnerability is further compounded by inadequate housing, lack of risk-reducing infrastructure (e.g. drainage systems), less financial and legal protection (e.g. lack of secure tenure and insurance) and limited adaptive capacity (e.g. limited ability to move to safer sites or invest in resilience, including preparedness).

Table 1. Direct and indirect impacts of climate change in urban areas¹

CHANGE IN CLIMATE	DIRECT IMPACTS ON URBAN AREAS	INDIRECT IMPACTS ON URBAN AREAS	REASONS FOR DISPROPORTIONATE EFFECTS ON LOW-INCOME GROUPS
Changes in extremes			
Tropical cyclones, storm surge	High winds Storm surge-induced-flood Heavy rainfall	Disruption of livelihoods and city economies Damage to infrastructure, including homes and businesses Loss of life and assets	Location of vulnerable informal settlements in low-elevation coastal zones (LECZs), particularly in least developed countries (LDCs), which account for 21 percent of the world's total urban population living in this zone (versus 11 percent for OECD countries), (McGranahan et al., 2009) Relatively small increase in wind speeds during wind storms can cause extensive damage to buildings (Adelekan, 2012)
Extreme rainfall	More intense flooding Higher risk of landslides	As for tropical cyclones, storm surge and precipitation	Informal settlements are often concentrated in floodplains that lack drainage systems, and on steep slopes where structures do not adhere to building codes (Hardoy et al., 2001)
Drought	Water shortages	Higher water and food prices Food insecurity Disruption of hydro-electricity Distress migration from rural areas	Low-income groups often face greater water constraints and are more vulnerable to increases in food prices
Extreme temperature events	Heat-waves Cold-waves	Short-term increase in energy demands for cooling/heating Effects on human health	Low-income groups are often concentrated in heat islands and live in high-density settlements that lack open space and ventilation
Abrupt climate change	Possible extreme sea level rise Extreme temperature change	As for sea level rise As for extreme temperature events	The urban poor commonly lack preparedness measures for sudden onset disasters, while governments commonly effective response and recovery strategies

¹ Table adapted from Dodman, D. and Satterthwaite, D., Institutional Capacity, Climate Adaptation and the Urban Poor. *IDS Bulletin*, 39(4) (2008), pp 67–74, Mitlin, D. and Satterthwaite, D., Urban Poverty in the Global South. Scale and Nature. New York: Routledge (2013), UN-Habitat, Adaptation Finance: Are Cities in Developing Countries Slipping Through the Cracks? UN-Habitat Cities and Climate Change Initiative Policy Note 1 (2011), and Wilbanks, T.J., et al., in Climate Change: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, UK (2007), pp 357–390.

CHANGE IN CLIMATE	DIRECT IMPACTS ON URBAN AREAS	INDIRECT IMPACTS ON URBAN AREAS	REASONS FOR DISPROPORTIONATE EFFECTS ON LOW-INCOME GROUPS
Changes in means			
Temperature	Fewer cold days and nights Warmer and more frequent hot days and nights	Increased energy demands for cooling Reduced energy demands for heating Urban heat islands intensify worsening air quality Creation of vector habitats in new areas	Many low-income settlements commonly lack access to public health measures to control or remove disease vectors and health care systems to provide needed response
Precipitation	Increased risk of flooding Increased risk of landslides	Distress migration from rural areas Interruption of food supply networks Increased transmission of malaria Increased spread of cholera	As for extreme rainfall and temperature, but also related to the lack of adequate sanitation systems that contribute to higher environmental health risks during flood events
Sea level rise	Coastal flooding	Reduced income from agriculture and tourism Salinisation of water resources Damage to coastal infrastructure Displacement of urban populations	As for tropical cyclones, storm surges

Residents of low-income and informal settlements remain on the periphery of deliberations on adaptation measures because of the often informal nature of their communities and unclear tenure arrangements. This leads to a degree of invisibility and lack of effective engagement in formal planning processes. It is therefore important to consider the underlying risk factors that create poverty and vulnerability (Feiden 2011), which includes limited access to finance. However, very little research has focused on the ability of the urban poor to access finance that will help them to reduce the risks from climate change. The following section addresses this gap by assessing the extent to which current climate funds channel resources to the poorest and most vulnerable groups in urban areas of low- and middle-income countries.

2

Global to local financing architecture

In response to growing global awareness of climate change, a range of formal structures has been created with the intention of disbursing funds to alleviate its negative impacts. Key features of each of the multilateral funds – such as the purpose of the fund and capitalisation approach; governance issues; operation of the fund, including operational guidance; prioritisation criteria; access to funds and funding decisions; and disbursement channels – will determine the degree to which money passes from the international level to the local level, into the hands of the urban poor. This section catalogues and appraises the current active mechanisms for financing adaptation to climate change at the global and national levels to show the degree to which their design is adequately directing funds towards urban adaptation.

2.1 Official development assistance (ODA)

There is considerable overlap between development and adaptation, and a clear intersection between the needs that ODA and dedicated adaptation finance seek to address, because the impacts of climate change can hinder effective development and threaten the performance and sustainability of development investments. In turn, sustainable development can reduce vulnerability to climate change (Huq and Ayers 2008a). Many urban interventions that contribute to climate change adaptation will be funded by existing ODA channels. At the same time, these ODA investments themselves will need to be 'climate proofed'. However, it is important to bear in mind that not all adaptation is development, and not all development reduces vulnerability to climate change.

It is increasingly accepted that ODA and adaptation finance should remain separate (i.e. that adaptation funding should be '*new and additional*'). Finance that would otherwise be labelled as ODA should not be 'repackaged' as adaptation finance and thus reduce current ODA levels (Huq and Ayers 2008b, p55). Defining what constitutes 'additionality', however, and then monitoring and enforcing it are different matters entirely. A definition has proved elusive, and there is not a universal mechanism to monitor, or indeed enforce any financial contributions or commitments (O'Sullivan et al 2011, p9). There is little tracking of where money is actually being spent, or adequate measures of its effectiveness. Despite this, an analysis of the categories of ODA activities reported by the OECD DAC countries showed that more than 60 percent of all ODA could be relevant to building adaptive capacity and facilitating adaptation (O'Sullivan et al 2011).

ODA therefore clearly has a role to play in reducing broader vulnerability to climate change. This can be through funding resilience building, which is necessary for 'additional' adaptation to be successful. ODA can also help with 'mainstreaming' climate change into existing development plans and processes, as well as 'climate proofing' development investments. This can take the form of funding 'baseline' development needs, so that finance provided through United Nations Framework Convention on Climate Change (UNFCCC) funds (discussed below) covers the incremental costs of adaptation. This means that adaptation finance is 'new and additional' to ODA, and also overcomes some of the practical barriers to adaptation that this principle throws up (O'Sullivan et al 2011).

Ambiguities in classifying adaptation projects can allow political, economic and social factors to influence which

(and how) activities are labelled with an adaptation tag. Conversely, mounting pressure to prove the 'additional' nature of adaptation funds, and not simply be seen as redirected ODA, has concentrated donors' and contributors' attention at the international level on attempting to track adaptation finance flows (Jones et al 2012, p6).

At the international level of UNFCCC negotiations, defining adaptation as additional to development is necessary to strengthen assessments of whether developed countries fulfil their agreed obligations to meet the costs of the additional stress on developing countries that climate change will exert. On the ground, however, defining adaptation as separate from and additional to development can be impractical and prove tricky, given that all adaptation must be underpinned by development objectives that seek to address the underlying causes of vulnerability.

International adaptation funds (with the exception of the Adaptation Fund, which is funded by a direct levy on Clean Development Mechanism transactions) are based on ODA-type bilateral donations. The need for adaptation funding is seen by most developing countries as a cost resulting from the actions of developed countries, and as such as, as debt incurred by them. Funding is expected, and must be 'acceptable', in the sense of being not only appropriate, but new and

additional, predictable, equitable, and adequate (Müller 2008, p4). Nevertheless, at the moment a relatively small percentage of ODA spending is being directed towards adaptation (Figure 1).

Crucially, if fast-start climate finance is indeed new and additional, ODA levels should correspondingly increase. Yet, according to the OECD, all ODA for all purposes from all countries (not just the fast-start contributors) between 2008 and 2011 only rose by about US\$11.7 billion (Ciplet et al 2012).

2.2 Funds under the United Nations Framework Convention on Climate Change (UNFCCC)

The Financial Mechanism (FM) of the UNFCCC, the legal framework for climate change, has evolved since its signing in 1992. In 1998, the Global Environment Facility (GEF) was designated as the Operating Entity. The GEF funds adaptation measures through two currently active funds: the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), which are voluntary funds that rely on contributions from developed countries. There is also

Figure 1. Percentage of ODA spent on climate change adaptation by OECD DAC donor governments in 2011

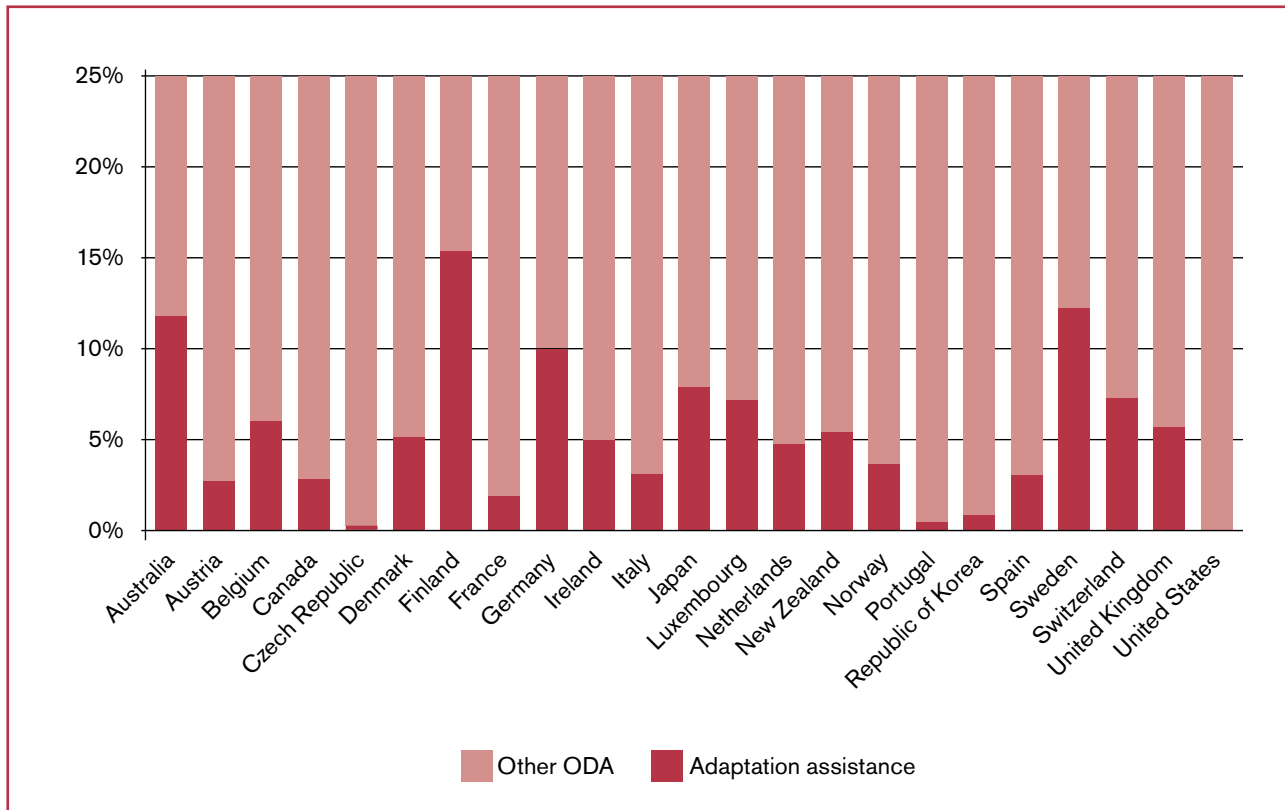


Figure 2. LDCF contributions by country

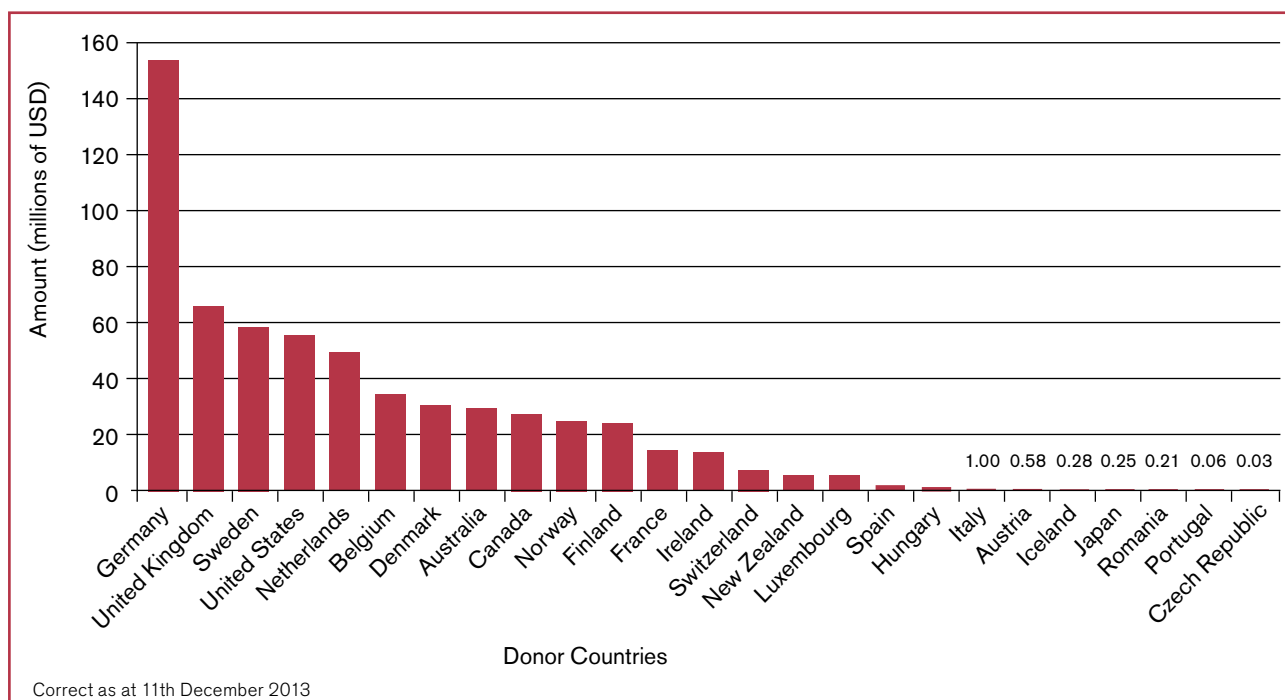
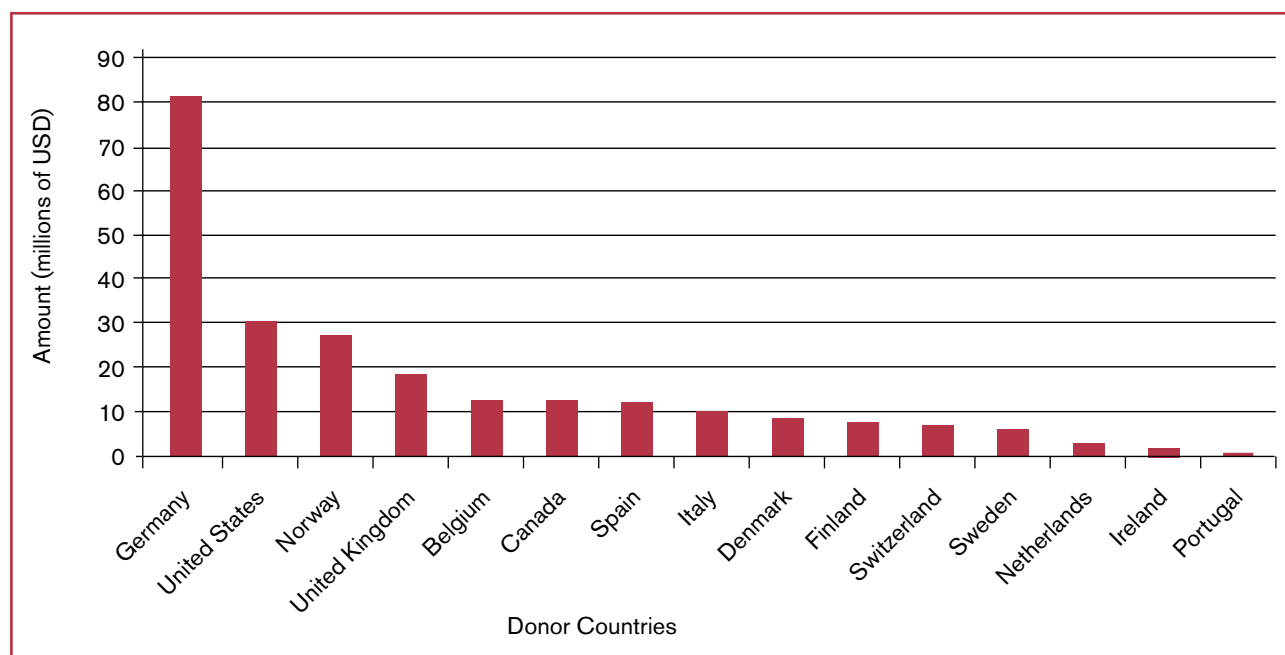


Figure 3. SCCF contributions by country



the Adaptation Fund, which was established in 2001 and became operational at the third meeting of the Parties to the Kyoto Protocol in Bali in December 2007. It is also a key part of the FM, but is largely separate and distinct from the GEF and does not depend on ODA-type contributions.

The LDCF was established to address the special needs of least developed countries (LDCs) under the UNFCCC. Specifically, the LDCF was tasked with

financing the preparation and implementation of National Adaptation Programmes of Action (NAPAs). Currently, \$604.74 million has been pledged to the fund, of which \$585.51 million has been deposited (Figure 2).

Adaptation is the SCCF top priority of the SCCF. Currently, \$258.58 million has been pledged to the SCCF, with a total of \$239.96 million deposited (Figure 3).

A comparison of the amount deposited in the funds and the amount actually disbursed reveals that significantly less has been disbursed than deposited. This has given rise to concern in the LDCs that insufficient funds are being directed towards adaptation efforts (Davis and Tan 2010, p10), and can reasonably cast aspersions over the impact that these funds have had in contributing to adaptation activities in practice.

The funds share a governance and operational structure. The GEF Council, when it is acting in the capacity of either the LDCF or SCCF Council, and the GEF CEO make decisions on spending. Decisions that require a formal Council vote are taken by a double-weighted majority: an affirmative vote from representing 60 percent majority of the total number of participants, as well as 60 per cent majority of the total contributions to the fund i.e. developed countries. GEF Council members from the countries that make the largest contributions carry the most weight, essentially giving them veto power, whereas the voice of the LDCs on the Council is weak because they are fewer in number and are often unable to attend meetings. This has raised concerns that the representatives of the powerful countries are making important decisions that are beyond the control of weaker constituents.

The Adaptation Fund (AF) is an alternative option for adaptation financing. Although this also falls under the remit of the UNFCCC, the Adaptation Fund Board (AFB) functions under the authority and guidance of, and is fully accountable to, the Parties to the Kyoto Protocol. The AF is the first multilateral fund wherein developing countries hold the majority of seats on its operating entity, and its composition in effect passes control of the AF from developed countries to developing countries.

The AFB also strives towards a relatively high degree of openness and transparency in its workings: it officially signed up to the International Aid Transparency Initiative in 2013, and civil society organisations (CSOs) have been able to observe its meetings. CSOs have also engaged actively with the fund, informing its design and operations, and participating in the implementation of projects and programmes. Crucially, however, they do not formally take part in discussions, nor do they have a formal role in its deliberations (O'Sullivan et al 2011, p7). It could be argued that scope exists for greater and more formalised arrangements to help ensure the active inclusion and participation of these organisations in AFB decision-making, to more closely integrate the adaptation needs of local stakeholders (Jones 2009, p15).

In contrast to the LDCF and SCCF, the AF does not depend on funding from developed countries or ODA, because it is primarily capitalised through a 2 per cent levy on certified emission reductions (CERs) from the Clean Development Mechanism (CDM). Many believe that the CDM levy is useful because it provides a relatively steady source of income, but others disagree about its stability given the volatility and fragility of the carbon market (Trujillo and Nakhouda 2013, p5). Nonetheless, it should be noted that the fund is also rather modest in size: it has only received \$151.32 million in pledges and deposits (Bangladesh 2012, p92) and 149 developing countries are eligible to access it, which presents challenges in allocating funding and offering programmes in all eligible countries that will have a significant impact.

An innovative feature of the AF is the level of access that allows national and regional institutions to apply directly for support. Recipient countries can access financial resources directly from the fund, or can assign a national implementing entity (NIE) of their choosing. This arrangement is intended to improve the delivery of financial support according to national needs and priorities, as well as promote a more balanced partnership between contributors and recipients (Craeynest 2010, p3).

Another feature of direct access is that implementing entities are responsible for carrying out project activities, which requires practical experience of development and adaptation activities. Civil society and local community organisations are best equipped to provide this working knowledge. This potentially provides the opportunity for local organisations to be more closely involved in the identification of project priorities (O'Sullivan et al 2011, p11). However, the need remains for greater engagement of local community-level stakeholders to ensure that local people share in decision-making about and the benefits that derive from programmes (Bangladesh 2012, p6).

In sum, given the proliferation of funding streams, the landscape of international adaptation finance under the UNFCCC can be a difficult one to navigate. Each fund has its own rules, which can potentially confuse low-capacity countries that are already struggling to assemble viable financial assistance packages. This in turn will affect the degree to which finance trickles down from the international level, via national governments, to the local urban level. In contrast to the high cost of adaptation anticipated – between \$70 billion and \$100 billion a year (World Bank 2010) – and the significant unmet adaptation needs in many low-income countries, the funds available are wholly inadequate (Parry et al 2009, p11 and Ciple et al 2009).

2.3 World Bank climate investment funds: Pilot Program for Climate Resilience (PPCR)

Outside of the UNFCCC, a range of other global funds have been proposed to tackle the impacts of climate change. The World Bank's Pilot Program for Climate Resilience (PPCR) is probably the most fully developed and implemented. Many rich countries have chosen to donate funds through this rather than the UNFCCC channels, which may be a reason why less money than originally envisaged is flowing via the official UN systems.

The basis for PPCR funding for adaptation activities are the recipient countries' climate change-related policies and NAPAs; so with regard to adaptation in the urban context, the impetus must be principally domestic. However, urban needs and priorities are neglected in many of these NAPAs, which means that even if they were to be fully implemented a significant proportion of the population would not benefit. Moreover, although nearly \$1 billion has been contributed to the PPCR, only \$8 million has actually been disbursed (O'Sullivan et al 2011).

The World Bank administers the PPCR and each of the Climate Investment Funds. For a country to receive finance it must be eligible for ODA, and be in an active multilateral development bank (MDB) country lending programme or policy dialogue. Priority will be given to LDCs eligible for MDB concessional funds, which includes Small Island Developing States. This has been a particularly contentious point; most of the funding under the PPCR is made available through loans, not grants, which historically have been counted as ODA.

MDBs implement specific country-based adaptation programmes. Each operation follows the investment policies and procedures of the MDB, including its fiduciary standards and all safeguards. As regards implementation, the 'PPCR Guidelines for Joint Missions to Design PPCR Pilot Programmes' issued to MDBs appear to offer the banks an equal footing with PPCR country governments: MDBs should work jointly with pilot countries to implement the PPCR, and the programme is designed to be implemented through the banks – despite guidelines that PPCR programme should be country-led and country-driven. The guidelines for Phase I delivery also make reference to engagement with civil society and NGOs.

However, the emphasis is on effective dialogue with other climate finance donors/development partners and UN agencies to identify and promote the necessary opportunities for co-financing and complementarities

during [programme] implementation. For example, in Bangladesh (one of the selected pilot countries), the PPCR has been reluctant to engage with civil society representatives because of their fairly active voice in climate change-related matters. They are concerned that grants are only a small element of much larger loans that could increase indebtedness; and argue that, by pushing loans for adaptation, the World Bank (as trustee of the CIFs) is encouraging an increase in debt levels of developing countries (Honkaniemi 2011, p14). The guidelines also state that the planning stage should be completed within 3-18 months (ideally one year). This may not offer sufficient opportunity for *meaningful* engagement with civil society, local (including urban) stakeholders and experts in the planning phase, and risks impeaching the 'country-driven' credibility of Phase 1 of the PPCR (Boonyabancha et al 2012).

2.4 National financing mechanisms for financing adaptation: Rwanda and Bangladesh

Governments in developing countries have established a number of national funds to address the adverse impacts of climate change. Although a number of funds are in their infancy, their establishment and management shows progressive action. At the same time, however, there are concerns about issues of local access and accountability.

One early example in this area is Rwanda, which in 2005 established the National Fund for the Environment with a mandate for soliciting and managing funds (FONERWA, now called the National Climate and Environment Fund). FONERWA was the linchpin of Rwanda's plan for attracting and streamlining climate finance, and leveraging private investment for low-carbon initiatives. The fund brought together a number of pre-existing similar funds to ensure coordination and a streamlined approach. FONERWA could not be capitalised by multilateral funds, and instead was principally bilaterally financed, mostly on a grant basis. However, various methods for domestic mobilisation of funds exist. The fund is now operational and has received £22.5 million from the British Department for International Development (DFID) for a two-year period, which makes it the largest climate fund in Africa.

Eligible applicants for money include government agencies, districts and CSOs. This would seem to suggest that the fund has been designed to ensure broad access, and that municipal authorities as well as organisations that represent urban stakeholders can seek money. The Management Committee had begun to receive funding proposals by the end of July 2013. It is

too early to comment authoritatively on the effectiveness of the fund.

Another example of an established national funding mechanism is the Bangladesh Climate Change Trust Fund (BCCTF). The BCCTF is an active move by the government to provide climate change financing; it intended to demonstrate the importance that government attached to climate change, and was passed into law by Parliament.

The BCCTF is capitalised by a block budgetary allocation of \$100 million each year for three years (2009-12, totalling up to \$300 million). This is in the form of an endowment taken entirely from the government's non-development budget (Hannah et al 2011, p3). The fund is permitted by law to spend 66 percent of allocated resources, with the balance (34 percent) to be invested as an ongoing source of income to the fund and for emergencies (Bangladesh 2012, p88). The BCCTF money is ring fenced and separate from the development budget.

This may mean, however, a more piecemeal approach to climate change adaptation projects, as opposed to effective mainstreaming into the planning process. There is also the risk that development projects may be repackaged as adaptation projects to get funds from the BCCTF, which has courted criticism from CSOs about the process of allocation and its outcomes. There is also evidence of locational bias aligned with vested political interests, and some of the projects have been more broadly environmental rather than focused specifically on climate change (Hedger 2011, p27). Only 3.1 percent of the total amount disbursed has gone to local government (Bangladesh 2012, p92).

Separate to, but alongside, the BCCTF, the Bangladesh Climate Change Resilience Fund (BCCRF) has been established with an amount of around \$110 million, funded principally by grants from international donors. The anticipated benefits of BCCRF include high level coordination, elimination of potential overlaps, helping with donor harmonisation, as well as flexible fund management and transparency. The principal aim of the BCCRF is to attract additional funding with the potential to be a "one stop shop" for disbursing these to climate-related activities (Bangladesh 2012, p88).

The UK is the largest single donor to the BCCRF, and because British aid policy does not allow direct transfer to the government of Bangladesh's account, the World Bank was nominated to serve as Trustee (Hedger 2011, p27). The World Bank's role in the BCCRF has created significant friction between the government and donors, and the bank was only mandated to offer technical assistance and fiduciary support to the fund during 2010-14 (Hannan et al 2011, p9). It was envisaged that responsibility would change over to a secretariat for national ownership in 2014.

This has been pushed back to 2017, however, because of the government's perceived lack of readiness.

Among the biggest challenges within the government, in particular the Ministry of Environment and Forests, is a lack of capacity in knowledge and coordination. Although the BCCRF is indeed a progressive measure, national ownership is still somewhat constrained by governance and capacity issues.

The BCCRF has two funding windows: an "off-budget" window for NGO/civil society and private sector projects, and an "on-budget" window for public sector projects. The off-budget window currently receives 10 percent of total funding to support the development of grassroots mechanisms to increase communities' resilience. However, the sum allocated to this window is paltry compared to the needs of those on the ground, and government officials have reported political pressures from members of parliament during the project selection process (Hedger 2011, p27).

Municipal authorities have no access to the BCCRF via the on-budget window – they are entirely dependent on the central government and the implementing agencies for funding. However, the off-budget window could potentially provide a good opportunity to support local urban adaptation projects. Before this can happen, local urban community groups must be made aware of the potential for adaptation support under the BCCRF.

A key takeaway message from these national funds is that their design is intended to offer an opportunity for local governments and grassroots organisations to access finance for adaptation projects. This is in contrast to the international funds, which are almost exclusively designed to work with national governments. However, in practice it appears that municipal authorities do not have the capacity or fiduciary capability to attract and manage funds via the national mechanisms. It is also unclear the degree to which representative organisations and CSOs have accessed funds for urban adaptation.

2.5 Issues around municipal spending

As explained in Section 1, urban centres are important locations for responding to climate change challenges. Cities are developed both formally and informally: through the planning and investment decisions of national, local and municipal governments, and through the actions of the private sector, civil society organisations and citizens. The actions of the various stakeholders therefore contribute significantly to vulnerability reduction. These can be financed through small investments; mainstreaming projects and processes in municipal or sectoral budgets; and formal 'adaptation' finance along the lines described in

Sections 2.2-2.4. However, there is not always evidence that the adaptation planning process is dovetailing with local development project planning processes (Brugmann 2011, p31-34).

For example, a city's planning department may complete a climate risk assessment and action plan, and integrate this plan into the official comprehensive plan. However, the roads or sewerage department, not to mention a private real estate developer, may fail to integrate the outcomes and recommendations of the general adaptation plan into the design of individual infrastructure projects and property development schemes. This can thus lead to discord in the parallel planning processes and an insufficiently coordinated approach to adaptation. From this perspective, it is essential to fully integrate the process into the statutory land use and development planning processes that establish conditions for local planning and construction permit approvals.

Local institutions with adequate financing and re-development authority and capabilities, which focus on the upgrading of specific areas or systems, are critical if cities are to rapidly and effectively reduce their risks from climate change and other disasters (Brugmann 2011). Fostering local institutional capacity is essential if international development banks and special climate funds are to leverage their limited resources to respond to rapidly emerging risks and develop quality project portfolios. Strengthening the capacity of such institutions, particularly in densely settled and highly exposed urban regions, may be the most important investments that can be made to support adaptation.

3

How can local funds reduce risk?

The estimated price tag between 2010 and 2050 for adapting to climate change will be in the range of \$70 billion to \$100 billion a year – or perhaps more if cross-sector impacts are taken into account (World Bank 2010, xv-xvi). It is apparent that the current levels of international funding are insufficient to meet current and future adaptation needs. Nor are donor- and government-managed funds accountable to the intended beneficiaries; the international agencies are accountable to the governments that fund them, and ultimately citizens of far-away countries (Mitlin 2013). Crucially, the money from the financing mechanisms is inaccessible to many of its intended beneficiaries – including residents of low-income urban neighbourhoods.

In response to the significant challenges that urban centres in low- and middle-income countries face, a number of local funds and community savings groups have emerged. These funds seek to place decision-making power into the hands of those that need it the most and offer scope for the greater integration of different activities. The structure and relative benefits of this alternative system is contributing to a transition from a welfare-oriented approach to more participatory governance.

As these funds have grown, the groups that manage them have leveraged the political capital of poor urban communities to negotiate for further funds from governments and international aid agencies, thereby creating new vertical links that did not exist before. This section presents the general principles of these funds; the way that they have developed around the world; and then explains their contribution to building resilience from the ‘bottom up’ in Malawi, Nepal and Myanmar.

3.1 Local financing mechanisms that can contribute to adaptation

These local financing mechanisms are distinguished from the ‘top-down’ development finance and supply-driven modalities detailed in Section 2. They invert the conventional/formal system by starting with the resources, needs and priorities of the urban poor and then work from the bottom up to address them (Boonyabancha et al 2012).

In the absence of accessible and flexible formal finance, which top-down approaches have largely been unable to offer, communities have taken it upon themselves to create their own financing systems. These are based on community savings groups (primarily led by women), which pool households’ collective resources in a communal fund that can be used to provide quick and easy loans for a variety of small projects, including slum upgrading, housing improvements and income generation investments (Archer 2012 and Mitlin 2008a). These mechanisms can help forge stronger links between communities and the government, which leads to improved living conditions, and can be scaled up via networks of local groups (Mitlin 2013).

This approach creates political space and opportunities, as communities use their collective savings to defend against the threat of eviction, negotiate for secure tenure and finance their own improvement schemes in ways that draw local governments into the process, particularly regarding the provision of basic infrastructure and services (Mitlin 2008a). For example, the construction of houses that are of better

quality and larger than contractor-built houses, or community-designed and managed toilet blocks that function more effectively than conventional public toilets, become precedents for demonstrating the potential of communities to manage larger programmes if supported by governments and international agencies (Appadurai 2001; Mitlin and Satterthwaite 2007).

As savings groups grow, they are encouraged to federate with similar groups. To propagate their savings, federations have created urban poor funds at the city and national levels. These funds consolidate savings into a revolving fund that provides loans to communities, which can be used to purchase land and housing or drainage, water and sanitation systems. The loans have low interest rates that are used to capitalise the revolving fund so that more communities can benefit. Thus, community savings have effectively been transformed into a self-sustaining city-wide financing mechanism for supporting community-driven projects (Mitlin 2008a).

The strong horizontal links of urban poor funds means that top-down finance structures are largely avoided (Mitlin 2008a). For example, many funds at the city and national levels are led by committees that are composed of community members and federation leaders (often women savers) that often include CBOs and government officials. Urban poor funds also support networking activities such as inter-community and transcontinental exchange visits, which are important for learning from the process and for linking savings groups together, both within and between countries (Appadurai 2001).

3.2 Taking local funds to scale

An example of a local fund that has made a tangible impact on the lives of low-income urban residents is the Urban Poor Fund International (UPFI), created in 2001 as a joint initiative between Shack/Slum Dwellers International (SDI) and the International Institute for Environment and Development (IIED) (Mitlin and Satterthwaite 2007). The UPFI capitalises local funds established by the 33 national federations across 464 cities within the SDI network. It combines the collective savings of the residents with donor (and sometimes state) funds and channels this money to local stakeholders via member federations. Loans are allocated for projects proposed by the local savings groups, with the provision of money ultimately determined by SDI's leadership, which consists of community leaders and development professionals from the global south who are acutely familiar with local needs and priorities (Mitlin 2013 and 2011). Since 2001, the UPFI has channelled \$20 million into national

funds, which has improved the living conditions of more than 200,000 poor people in informal and low-income settlements through secured land tenure, improved infrastructure and basic services (Mitlin 2013). A defining feature of the UPFI is that funding and spending decisions are made within a community management framework that is controlled by, and directly accountable to, the urban poor (Mitlin 2013).

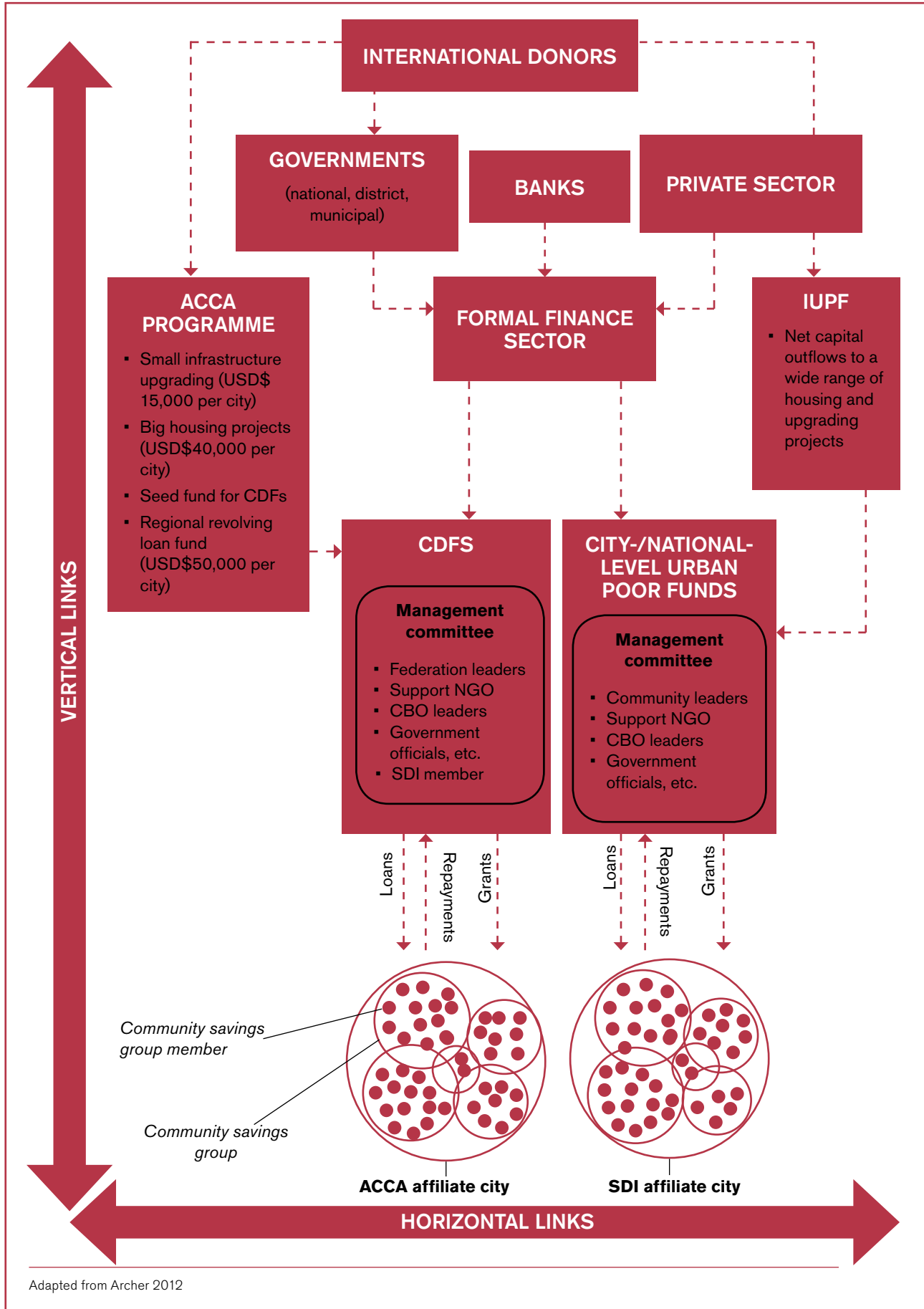
Within Asia, a similar modality to urban poor funds has emerged in the form of community development funds (CDFs), which have been established in more than 168 cities in 19 countries (including Thailand) through the Asian Coalition for Community Action (ACCA) and implemented by the Asian Coalition for Housing Rights (ACHR), both of which are SDI partners (Satterthwaite 2013). By January 2012, they had delivered \$10 million of funding for community projects (Mitlin 2013).

The ACCA programme (see Archer 2012) seeks to support the development of an Asia-wide revolving loan fund that provides loans of up to \$50,000 to CDFs with limited capital. ACCA also provides grants that can be used to capitalise CDFs (i.e. seed funds) and motivate communities to collectively prioritise investments in their city. The programme also provides funds to communities for projects that lead to concrete change, thereby motivating communities to access larger funds. For example, ACCA channels small project funds of \$15,000 per city for infrastructure projects and big project funds of \$40,000 per city for housing improvements and construction projects through CDFs so that communities see what can be achieved through revolving loan funds (Archer 2012).

As SDI's sister network in Asia, ACCA's funding structure is quite similar to that of urban poor funds, though the UPFI does not provide grants to support particular programmes (Figure 3). Instead, it allows federations to submit funding proposals for a variety of projects. Funds are then channelled as net capital outflows to national or city-level urban poor funds as loans (SDI 2011). Although the capital recovered flows back to national or city-level funds via loan repayments with interest, the UPFI is replenished with inflows of donor monies. The five Asian countries that are affiliated with ACCA and SDI (Nepal, Cambodia, Philippines, Sri Lanka and India) receive support from both networks.

Before allocating loans, ACCA and SDI begin by conducting city-wide, community-led enumerations that profile the socio-economic conditions of the poorest and most vulnerable communities as a basis for determining investment priorities. A number of federations also conduct community-driven risk assessments, which include environmental mapping, historical timelining and soil assessments, as demonstrated by the Homeless People's Federation Philippines, Inc. (HPFPI) and its support NGO the

Figure 4. Urban Poor Fund and CDF funding structure and capital flows



Philippines Action for Community-led Shelter Initiatives, Inc. (PACSI) (Carcellar et al 2011).

The gathering of community-rooted information is particularly important considering the nature of 'illegality', which has prompted evictions, but has also prevented informal settlements from being recorded in formal land administration systems and mapped on cadastres. As a consequence, state censuses and other methods for collecting information to inform planning and investment decisions commonly neglect informal settlements (i.e. the 'invisible' parts of the city).

This means that the information needed to develop profiles of communities at risk from the impacts of climate change and to inform pro-poor adaptation planning and investment solutions frequently does not exist (Carcellar et al 2011). Thus, local funds not only enhance access to resources. They also facilitate bottom-up, city-wide planning processes that allocate resources based on the needs and priorities of communities as they – rather than international agencies – define them.

In summary, these funds have demonstrated their capacity to address substantial urban development challenges. They therefore show significant potential as the basis for developing adaptation finance mechanisms that are more attuned to the needs and priorities of the urban poor. In addition, the methodologies used for gathering and organising information can themselves generate knowledge that can form the basis for equitable and effective adaptation actions. The following three examples provide an early indication of how this might work in practice.

3.3 Community-driven finance mechanisms: Malawi

Despite international organisations' attempts to reach low-income groups, rapid urbanisation and erroneous targeting of interventions in Malawi have left the urban poor in continuing need of adequate and secure shelter (Manda 2007). In response, the Malawi Homeless People's Federation and its support NGO the Centre for Community Organisation and Development (CCODE) were formed in 2003. Specifically, they were formed based on two principal factors. Firstly, the success of countries affiliated with SDI (notably South Africa, India and Thailand) in helping communities gain access to secure tenure and in strengthening their relations with government officials. Secondly, the recognition that a demand- rather than a supply-driven approach would respond more effectively to the needs and priorities of the urban poor, and would help eliminate further inequalities.

The creation of savings groups by the Federation was the first step towards achieving these aims. Savings groups are typically comprised of 30 to 70 members in a neighbourhood; some settlements can have up to 10 or 20 autonomous savings schemes depending on the size of their populations. The management system organises savings groups into neighbourhoods to increase participation and capital consolidation.

Although savings groups were originally composed of women, men have also become involved after seeing the progress on housing improvement and income generation loans. Savings groups also serve as a tool for mobilising women and men to work collectively and as a training facility for developing financial management skills.

In addition, CCODE supports exchange visits that enable experienced savers to train new members in other communities, including those in other towns and cities, which is helping to solidify stronger and larger networks that can negotiate with government institutions and external agencies (Boonyabancha 2001). Today, registered members of savings groups now total more than 15,000 across 28 urban and rural centres with \$148,035 in daily savings (SDI 2011).

In response to the inability of local savings to meet the costs of housing requirements and business activities, the Federation and CCODE in 2003 formed the Mchenga Fund (Malawi's national urban poor fund). Each member contributes 50 kwacha (MK) – less than \$1 – per month to capitalise and ensure collective ownership of the fund, which as a revolving fund provides individual and collective loans to finance housing construction. The fund has also successfully leveraged resources from local governments and external agencies, particularly from the Bill and Melinda Gates Foundation, through the UPFI.

Since 2003, the Federation has successfully negotiated land for more than 3,000 members, with the first development of 222 plots occurring in Area 49 in Lilongwe, followed by 465 plots in Blantyre and 80 plots in Mzuzu. All of these were provided cost-free by the city councils of each city, which is a remarkable achievement within the SDI network (Mitlin 2011). In the three years leading up to 2011, the federation has constructed more than 750 houses, amounting to roughly 275 houses per year.

The Mchenga Fund is working to finance a number of community-driven projects that are enhancing resilience to disasters and climate-related hazards. For example, the Federation and CCODE have been instrumental in driving a paradigm shift in slum upgrading, as shown by Lilongwe's new City Development Strategy 2011-2015. The CDS supports community-driven slum upgrading projects that are aligned with the SDI approach, beginning with city-wide surveys and enumerations

that prioritise the poorest and most vulnerable communities for investment. Currently, Lilongwe City Council is helping to support projects in Mtandire and Chinsapo with funding from the Bill and Melinda Gates Foundation.

Specifically, the Federation and CCODE are working with Circle for Integrated Community Development and WaterAid to implement various projects in both communities that will deliver improved resilience measures, including the construction of elevated water tanks², water kiosks, sanitation facilities, solid waste management, and access roads, including grading and drainage. CCODE's role has been to provide technical assistance, whereas the federation has managed day-to-day construction, with support from the Informal Settlements Network (ISN)³, which is a network of volunteer community members who help to coordinate and oversee construction.

A critical mass of slum dwellers, who have used their political capital to negotiate for the resources required to undertake larger-scale upgrading projects in partnership with city councils and donors, have made the projects in Mtandire and Chinsapo possible. These partnerships are important to consider, given the limits to what communities can achieve without support from local governments in financing and building the 'trunk' infrastructure that is ultimately required to guard against disaster and climate-related risks (Mitlin and Satterthwaite 2013). Upgrading is now addressing many of these risks.

These projects also highlight the limitations of defining adaptation as separate from development if basic infrastructure and services are considered as an essential foundation for adaptation. Federations and their support NGOs are well placed to undertake this work, given their relations with the most vulnerable communities and intimate knowledge of localised environmental issues, including those related to climate impacts.

3.4 Community-driven finance mechanisms: Nepal

As in Malawi, low-income residents have long struggled to gain access to secure housing. The inability of governments to implement housing programmes during the 1990s coincided with rising rural-urban migration trends, which began to spur rapid urbanisation, particularly in Kathmandu Valley (Manandhar 2002).

In recent years, growing land pressures driven by private developers have priced low-income groups out of the housing market and thereby driven growing land pressures, which has contributed to the growth of squatter settlements (UN-Habitat 2010). Meanwhile, evictions have grown markedly since the government initiated a campaign in 2001 to halt the encroachment of forests and national park lands. The Lumanti Support Group for Shelter, the support NGO for the Nepali Homeless People's Federation, has emerged not only in response to the inability of squatters to access housing finance, but also to forced evictions and the harassment of the urban poor by disapproving governments.

As in other countries in Asia, ACCA has been instrumental in establishing Urban Community Support Funds (UCSFs) in Nepal, which are similar to CDFs. The first UCSF was created in Kathmandu city in 2001 with a Rs 1,000,000 (approximately \$11,000) seed grant from ACCA, which Lumanti, Kathmandu Metropolitan City (KMC), Action Aid Nepal, WaterAid and SDI matched. The core objectives of the UCSF are to:

- Provide secure housing ownership through financial support for purchasing land and financing housing construction and improvement.
- Provide financial access to undertake income generation activities, entrepreneurial training and capacity development.
- Support the urban poor in fulfilling their basic social and physical needs.
- Facilitate the dissemination of support from partner organisations to urban poor communities.
- Improve the livelihoods of the urban poor through financial and social development and assist in poverty reduction (Manandhar and Gurung 2008).

Importantly, the committee for each UCSF is headed by the municipality. The political leadership that Mayor of Kathmandu city Keshab Sthapit has shown in championing the Kirtipur Housing project, which was initiated in response to the evictions associated with the government-led Vishnumanti Link Road Project, has strongly influenced this structure. It was also the first project that Kathmandu's UCSF supported and has served as an important precedent for showing government officials and donors what communities can achieve with the support of local governments.

Lumanti worked with displaced communities in partnership with Mayor Sthapit and various other NGOs to secure a landmark Memorandum of Understanding (MoU) that KMC, Lumanti and the federation signed.

²Two elevated water tanks with water connections provided by the Lilongwe Water Board have been constructed in Chinsapo, each supplying clean drinking water to 1000 people. The water is sold at water kiosks at MK 20 (\$0.06) per 20 litres from 5am and 8pm each day. Previously, water kiosks in Chinsapo were only open for two or three hours a day.

³ISN is a network of volunteer community members who help the Federation and CCODE to coordinate and oversee construction works.

The MoU committed Rs 2000 (approximately \$27) a month for three months to rent alternative accommodation. Members of the federation, with the support of Lumanti and the mayor, worked together to identify potential sites for resettlement. After visiting several potential sites and making an inventory, six *ropanis* (3052.4 m²) of land was purchased through the UCSF at Paliphal in Kirtipur municipality for Rs 300,000 (approximately \$3,318). In total, 44 two-storey homes were constructed, based on housing designs that the community chose. It was agreed that the households would repay UCSF the cost of land and the loans for housing construction over 15 years.

This particular project provides important insight into the role pro-poor finance in supporting community-driven processes. In particular, it shows how UCSF benefits the poorest and most vulnerable people in ways that have clear relevance for supporting adaptation, whether through resettlement planning, upgrading or other adaptation projects.

This mode of finance is also beginning to be applied to climate change adaptation, as shown by the Community Resilience Fund, which the Huairou Commission created. The fund operates in Honduras, Guatemala, Nicaragua, Peru, the Philippines, Kenya, Uganda, Jamaica, Turkey, Indonesia, Sri Lanka and Nepal, with funding from the Norwegian Ministry of Foreign Affairs, UNDP Gender and the World Bank Global Facility for Disaster Risk Reduction (GFDRR). This is a recent innovation that has been driven by two factors. Firstly, dedicated climate change adaptation funds continue to come on stream with the aim of reducing risks and vulnerabilities. Secondly, few mechanisms remain to support the participation of the urban poor in country-driven policymaking processes. To address this gap, the Community Resilience Fund aims to:

- Scale up solutions to address locally identified risks and vulnerabilities, and the effects of climate change.
- Establish local stakeholder platforms that put grassroots women's priorities and practices on the national disaster reduction and climate change adaptation agendas, as well as development programmes.
- Create win-win partnerships with local authorities and disaster management or climate change adaptation authorities that inform and reduce the vulnerability of poor communities.
- Mobilise [and] access resources and decision-making opportunities linked to DRR [disaster risk reduction], CCA [climate change adaptation] and development programmes (Huairou Commission 2010).

The Community Development Resilience Fund (CDRF) in Nepal was created in 2012, and bears many similarities to UCSFs. A national committee manages the CDRF and is headed by the National Network for Grassroots Women for Resilience (NNGWR), which comprises seven NGOs that are dedicated to empowering women at the community level. This includes Lumanti, which works alongside the National Society for Earthquake Technology-Nepal (NSET) as the secretariat for the NNGWR. The CDRF was capitalised by a contribution of Rs 35,000 (approximately \$386) from each of the NGOs in the network, including the Huairou Commission, which provided a seed grant of 15,000 (approximately Rs 1,362,000).

As a revolving fund, the CDRF provides grants and loans with 2 percent interest rates. The CDRF will be piloted in eight of the most vulnerable communities in the Kathmandu Valley (Kathmandu, Kaski, Butwal and Bardai). Each recipient community has savings groups that pool their resources and mobilise collective action, and a focal person who is responsible for communicating priorities to a Fund Management Committee, which is composed of 20 women from the NNGWR in each district. It is important to note the similarities between the decentralised management structure of the CDRF and urban poor funds and CDFs. This shows the effectiveness of community-driven finance mechanisms in reaching the poorest and most vulnerable groups in urban areas.

3.5 Community-driven finance mechanisms: Myanmar⁴

Myanmar has experienced seismic political changes and an influx of investors who are seeking to exploit the country's vast natural resources and cheap labour. Consequently, market forces are making land prices soar. Evictions are increasing, and problems of urban and rural landlessness are getting worse.

Climate-related hazards have also had a significant impact on the housing of low-income urban residents. In 2008, Cyclone Nargis killed 140,000 people and devastated the country. In many ways, the cyclone heralded new development possibilities: because the catastrophe was so great and affected so much of the country, the government had little choice but to finally open up the country to assistance from international agencies.

⁴ The information in this subsection is taken from Newsletter of the Asian Coalition for Housing Rights, No. 18, August 2013.

However, many of the projects that these agencies implemented followed the top-down, supply-driven models described in Section 2, in which poor communities were expected to be the passive (and grateful) recipients of someone else's idea of what they needed. In contrast, a number of small-scale community initiatives showed how much poor communities could do to solve their own problems of poverty, land, housing and livelihoods, when they were given a little space, and access to very modest resources, to plan and carry out their own solutions. These projects offer development agencies a working template for ensuring a more people-driven process that contributes to resilience.

In the Kunchankone, Kaw Hmu and Dedaye townships, people rebuilt their villages themselves. The projects in these three devastated areas worked within village structures to make the affected communities the key actors in planning and carrying out their own post-disaster rehabilitation. The work included setting up community savings groups and using the collective rebuilding of houses to get people to work together to address a wide range of needs. After the cyclone rehabilitation, the process moved to urban Yangon, where there were many squatters and poor room-renters. The women's groups that were set up used ACCA support to buy land and develop three small housing projects in just two years.

In the years following Cyclone Nargis, it has become apparent that these local groups can facilitate a participatory development process with much greater ease and less interference than the international agencies can. This can be attributed to the fact that their process builds on self-reliance and deeply-rooted traditions of mutual help. When people are given the chance to do things themselves, and to unlock their own creativity, energy and resourcefulness, they are shown to be able to stretch limited funds to do much more; and they build their houses better, cheaper and faster than government or international agencies. The community-driven process also encompasses physical, social, economic and emotional dimensions – thereby leading to a much broader process of building long-term resilience.

4

The gap between top-down and bottom-up finance

The Millennium Development Goals Report 2013 states that the proportion of slum dwellers in the cities and metropolises of the developing world is declining. But, concurrently, an estimated 863 million people still reside in slums in the developing world and the number of slum dwellers, in absolute terms, continues to increase (United Nations 2013, p50). This would seem to indicate that the current development paradigm is wrong (Mitlin 2013), and further underscores the need to work with stakeholders on the ground. A reconfiguration of funding mechanisms may be required to address this potential mismatch (Balbo et al 2013, p15 and 17).

4.1 International funding mechanisms are inadequate

Multilateral climate funds remain at a relatively modest scale compared with the needs of developing countries, and have failed to gather and deploy sufficient money to match the size and urgency of requirements (Smith et al 2011 p988). The concept of 'new and additional' funding remains a crucial one in financing adaptation: historic responsibility indicates that funding for adaptation should be in addition to ODA; and despite clear links, developed nations should not simply re-label

ODA as adaptation funding. This has been a particularly contentious point surrounding PPCR funding; most of the funding under the PPCR is made available through loans, not grants, and these loans are counted as ODA.

The GEF-managed funds, the LDCF and SCCF, are also capitalised by ODA-type pledges from developed countries. Although the money pledged has by and large been deposited in these funds, the amount actually disbursed is considerably lower, which is of concern with regard to financing adaptation projects. Given the voluntary nature of the contributions, it is unclear that deposits of sufficient funds will continue. The LDCF and the SCCF have been criticised for the inadequacy of resources to address the most urgent and immediate adaptation needs of LDCs⁵, while adaptation finance remains highly unpredictable, and provides vulnerable countries with few opportunities and incentives to invest in longer-term capacity building, institutional frameworks, planning and investments⁶.

A restructuring of adaptation finance mechanisms will be necessary to ensure that the needs of the urban poor are adequately considered in the design and allocation of funds. This is true at all levels of government. For example, in Bangladesh it would appear that the central government has not yet conceptualised adaptation as

⁵ Revised Programming Strategy on Adaptation to Climate Change for the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). LDCF/SCCF Council Meeting November 18, 2010, p.7.

⁶ Progress Report on the Least Developed Countries Fund and the Special Climate Change Fund, 23 May 2013, Para 33, p.19.

an urban issue, and anecdotal evidence indicates that city corporations do not consider adaptation to climate change a priority matter.

An essential step before this, however, is the recognition of the right of low-income urban residents to live in the city in decent accommodation. Metropolitan authorities frequently do not recognise informal settlements, with the consequence that their inhabitants have few opportunities to access finance for building resilience, and are not invited to participate local planning. To effectively and comprehensively integrate the adaptation needs of the urban poor into climate funds, their voices must first be recognised as legitimate, knowledgeable and important.

Despite the scope for a more effective model for financing urban adaptation through locally managed funds, in effect a gap remains between the funds and the formal international adaptation funding, which suggests the need for a recalibration in the workings of the international funding mechanisms. Large centralised bodies, such as the World Bank and the management organisations of the UNFCCC funds, currently cannot work with local urban stakeholders.

Multi-level networks, however, can tackle this incongruity in scale – for example, ACCA and UPFI provide an effective conduit to the urban poor. This may also, however, require flipping the current working archetype on its head, from a focus on projects and outputs, to one that supports local processes. For example, the ACCA and CODI programmes provide funding and allow those on the ground to make decisions, and in doing so address risk and vulnerability⁷.

4.2 Lack of accountability in funds to beneficiaries

Bilateral aid agencies are accountable to the governments (and by extension their citizens) that fund them. MDBs are accountable to the governments that sit on their boards. But these funding agencies have no direct accountability to the low-income groups they are purporting to serve (Satterthwaite 2012). Locally managed funds – such as those administered by SDI, ACCA and UPFI – can challenge this norm, and reconstruct the relations of accountability and control of funds, vesting decision-making and spending power in those most at risk.

Climate programmes can be aligned with poverty alleviation programmes. Investments that address development needs, such as providing risk-reducing infrastructure (e.g. drainage systems) and supporting income generation, often have indirect relevance in

enhancing the ability of the poorest and most vulnerable groups to cope with, and recover from, hazard events (i.e. adaptive capacity). This ‘development first’ approach addresses local vulnerability as the starting point for adaptation (see Ayers and Dodman 2010), which suggests that being a member of a federation that aims to meet basic needs is in itself a form of resilience.

International agencies and banks are not structured to work directly with urban poor groups or to be accountable to them; the assumption being that national and local government ‘partners’ will be willing to implement pro-poor policies and channel ODA to the urban poor (Mitlin and Satterthwaite 2007). However, national and local governments in many low- and middle-income countries are often neither effective nor accountable to their low-income populations (Satterthwaite et al 2012). All too often, donor and aid projects fail to meet local needs, and the projects they fund are not accountable to the urban poor (Feroze 2013).

4.3 Local and urban actors are unable to access funds

There is an apparent mismatch of scales and structural constraints that make it difficult – if not – impossible for aid agencies to reach low-income urban communities. As discussed, aid agencies are designed to work with national governments, as opposed to local urban authorities, and the urban poor face difficulties in accessing this money (Mitlin 2013).

Irrespective of the amount of money currently contained in the collective international funds’ coffers, the design of these mechanisms will determine how far they can (at least in part) meet the adaptation needs of cities and their low-income residents. At the international level, climate finance is channelled towards city-level interventions via national governments, but cities’ access to funding is uncertain (Beltran 2012) p4 and 6). Typically, national governments lack a thorough understanding of local needs, making it difficult for communities and urban authorities to access money.

This is exemplified in Dhaka by a lack of access to the BCCTF and BCCRF, as well as of opportunity to increase revenue that is not exclusively dependent on the national government. This in turn amplifies the requirement for effective access to international funding for adaptation. In Dhaka, the local urban authorities (the city corporations) are extremely dependent on government funds. The functional jurisdiction of the metropolitan authorities is restricted, and responsible agencies for services and infrastructure have

⁷ Ibid.

proliferated. This could make channelling adaptation financing complex.

The multitude of funding streams can also prove bewildering for low-capacity developing countries, because they are required to meet multiple fiduciary and reporting requirements to get access to finance. Indeed, a growing body of literature refers to a democratic deficit between international aid agencies and development banks, and the beneficiaries (including urban poor groups) they claim to support. Much of this literature has identified a significant gap between the decision-making processes of international agencies, which largely determine the priorities for ODA, and the urban poor, who are largely unable to influence what gets funded and by whom (Satterthwaite 2001).

The governance structures of the LDCF and SCCF have also been targets for criticism, because the decision-making machinery would appear to favour the donor countries. Moreover, for both the LDCF and SCCF, countries can only access GEF resources through an implementing agency of the GEF. Recipient countries often need to work with multiple MDBs, as well as other development partners, to access and deploy climate finance. This means compliance with a number of perspectives, approaches, and processes. This makes the country's task of coordinating international climate finance quite challenging, and can lead to less effective results (Patel and Brown 2013).

5

Bridging the gap: the way forward

Three key themes have come to the fore: international and national funds are currently insufficient to meet adaptation needs; the formal adaptation financing mechanisms offer little in the way of tangible accountability to their ultimate beneficiaries (including low-income urban residents); and the design of these funds means that access to finance by sub-national governments and civil society groups in cities is significantly hampered. New modes of adaptation are clearly required to more closely align access and dispersal mechanisms with the needs of low-income and highly vulnerable urban residents.

Development agencies could invest in city development funds and upstream international funds to meet their own development objectives, and improve accountability and transparency in the use of funds. Nevertheless, outstanding issues must be more closely defined, researched and clarified to ensure effective programmes that reduce the risk and vulnerability of low-income urban residents. The following areas have been identified to inform and shape this on-going discussion, and each suggested area may help address one or more of the three overarching themes identified.

5.1 Support climate change adaptation on the ground

Individuals, community organisations, private sector actors and local governments will take many of the actions that are required to strengthen resilience to climate change autonomously. A central pillar for

enabling urban adaptation will therefore be to support these responses. This highlights the need to support local urban adaptation, built on a foundation of effective pro-poor governance, which also tackles infrastructural and democratic deficits. This can be accomplished by working with stakeholders and representative organisations directly and channelling money into the hands of those that require it the most. In practice, this will mean making funding available to grassroots organisations formed by those living in slums or informal settlements for initiatives that they choose (Patel and Brown 2013). This in effect redeploys finance and removes current barriers to access.

Indeed, the urban poor can act as risk analysts, managers and reducers, and accurately pinpoint adaptation and development needs (Satterthwaite 2013). Involving low-income groups improves learning and builds the capacity to manage funds and projects. It also changes the perception of people in low-income settlements change from '*people at risk*' to '*people with capacity to manage risk*'. Furthermore, climate change adaptation and good local development go hand in hand. As can be seen in the case studies from Malawi, Nepal and Myanmar, addressing priorities identified by community organisations from informal settlements reduced risks through improvements in housing, infrastructure (for water, sanitation and drainage) and services (including disaster risk response capacities). In the absence of such benefits for local communities, community groups and local governments are unlikely to show an interest in, or commitment to, climate change adaptation (Satterthwaite 2013).

Numerous community initiatives have successfully reduced risk. For example, the ACCA (as discussed in Section 3) has supported more than 1000 community initiatives. The funding available for each initiative was small-scale, at only \$1000-\$3000, which shows that significant sums of money are not necessarily required for effective adaptation measures. In most of these cities, several different community initiatives were supported that promoted a more joined up approach, which led to collaboration and better working relations with the local government, as well as the establishment of jointly managed city funds. Consequently, community organisations became the drivers of change within their settlements and the cities. These were not necessarily climate change adaptation programmes, but by allowing those in informal settlements to determine what was done, it meant that hundreds of initiatives took place that have strengthened adaptive capacity and increased resilience (Satterthwaite 2013).

Such examples show a number of benefits of working closely with organised groups of urban residents. These include the more accurate identification of needs for locally managed initiatives, and allowing those most intimately acquainted with issues, and best placed to deal with them, to make decisions about them. This approach can also lead to swifter responses, because there is no need to wait for city administrations or national governments: action is taken when it is needed. Indeed, particularly in relation to climate change, communities cannot necessarily afford to wait for urban and national governments to act.

5.2 Recalibrate funding to the urban and local scale

This is true of government and finance at the national and international levels. There is a gap between what is actually happening and plans that are taking place at the national government level – and a still greater disconnect with global decisions that may be taking place. Organised communities must take part in planning and development decision-making to ensure greater accountability. Indeed, empowering low-income individuals and communities through self-determination confers multiple benefits: leveraging other funds; integration with different activities; and enabling communities to work together to enable city-wide upgrading and catalyse political change at the urban government level.

Various restrictions limit the ability of metropolitan authorities to provide public goods and services. Institutional deficits, poor governance, lack of access to local revenue, and lack of opportunity to increase

revenue that does not depend exclusively on the national government can severely constrain effective urban adaptation. This further increases the requirement for effective access to international funding for adaptation. The functional jurisdiction of metropolitan authorities is often restricted, and responsible agencies for services and infrastructure proliferate. This makes channelling adaptation finance complex.

In contrast, where locally managed funds have been successful (for example, Malawi's Mchenga Fund), additional funds have been leveraged from local governments. They have fostered healthy working relations with those living in the informal settlements, and improved cities' capabilities to scale up their efforts (Satterthwaite 2013).

To overcome issues of access to funds and accountability, international funds should support local and city processes that drive climate change adaptation. Local governments and representative organisations should be given an opportunity to work directly with these funds, and be given a voice.

5.3 Focus on the performance of funds

International adaptation funds present an opportunity for federations to tap into new channels of finance for building resilience. However, considering that these funds are unlikely to be sufficient and do not take into account the costs of basic infrastructure and service deficits, it is clear that urban poor funds (and community development funds) must continue to tap into government finance and leverage community savings to sustain their activities.

Top-down funds have not gathered sufficient capital, and it is impractical to assume that donor funding will continue indefinitely. Furthermore, this funding comes with strings attached and is subject to changing priorities (Archer 2012). Nevertheless, relying exclusively on public expenditure in the absence of sufficient external assistance is not an appropriate response in under-developed, rapidly urbanising cities.

An approach similar to that of the Malawi Aid Management Platform (AMP) could be a starting point for measuring the accountability and effectiveness of funds. This was introduced to help the government of Malawi track and report on external funding, which makes up about 85 percent of the public investment budget. The project activities of a total of 28 donors are mapped, thereby strengthening data management, enabling greater government ownership, and improving management for results⁸.

⁸ See Development Gateway Website, Malawi AMP – available at <http://www.developmentgateway.org/about/Case-Studies/AMP-Malawi>

5.4 Encourage private investment

Private investment will be essential to achieve resilient and low-carbon urban centres. However, questions remain on how adaptation, resilience and mitigation can be factored into the private investment streams that are the key drivers of urbanisation (Satterthwaite 2013). Best practice projects have addressed local environmental factors, infrastructure, buildings, commercial and social life, institutions, and governance issues in an integrated fashion, as opposed to a narrow focus on just adaptation. Resilience investments are likely to be more effective and efficient when fully integrated with performance-related development improvements.

Such a broadening of scope therefore creates a clearer link with an urban area's overall investment attractiveness and potential; rather than just being a risk-reduction cost, resilience investments aim to create an urban area's development premium, and thus make it more attractive for private investment. As a precursor,

it is essential to create financial instruments that reward investors for sound financial evaluation of risk profiles, and of the related contribution of different measures to reduce those risks. Such financial instruments may take the form of value capture instruments, insurance and re-insurance, catastrophe bonds, social impact bonds, or securitisation and structured finance (Brugmann 2011).

In conclusion, climate funds currently ignore cities and their lowest-income residents, and therefore do not prioritise them for funding. They are insufficient, unaccountable and inaccessible, and the money is not finding its way to those who need it the most and could potentially bring about the greatest change. Even when cities have engaged with climate funding, they have tended to ignore the poorest and most vulnerable. Bottom-up funds can work more effectively than current mechanisms, and illustrate the scale and scope of what relatively small sums of external finance could achieve.

References

- Appadurai, A., (2001) Deep democracy: urban governmentality and the horizon of politics. *Environment and Urbanization*, 13(2) 23-43
- Archer, D., (2012) Finance as the key to unlocking community potential: savings, funds and the ACCA programme. *Environment and Urbanization*, 24(2) 423-440
- Ayers, J., (2009) International funding to support urban adaptation to climate change, *Environment & Urbanization*, Vol. 21 (1), IIED
- Ayers, J. and Dodman, D., (2010) Climate change adaptation and development: the state of the debate. *Progress in Development Studies*, 10(2) 161-168
- Balbo, A. et al., (2012) Resilient Cities 2012: Congress Report, ICLEI
- Bangladesh, Government of the People's Republic of (2012) Bangladesh Climate Public Expenditure and Institutional Review, Government of the People's Republic of Bangladesh, Planning Commission General Economics Division
- Barbut, M. Climate Finance: Putting the Puzzle Together, UN Chronicle – available at <http://www.un.org/wcm/content/site/chronicle/home/archive/issues2011/7billionpeople1unitednations/climatefinanceputtingthepuzzlettogether>
- Beltran, P.T., (2012) International Financing Option for City Climate Change Interventions – An Introductory Guide, CDIA/PAKLIM
- Boonyabancha, S., Norberto, C., Kerr, T., (2012) How poor communities are paving their own pathways to freedom. *Environment and Urbanization*, 24(2)
- Boonyabancha, S., Savings and loans: Drawing lessons from some experiences in Asia, *Environment and Urbanization*, 13(2) (2001), pp 9-21
- Brown, A., et al., (2012) From practice to theory: emerging lessons from Asia for building urban climate change resilience. *Environment and Urbanization* 24(2)
- Brugmann, J., (2011) Financing the Resilient City: A demand driven approach to development, disaster risk reduction and climate adaptation - An ICLEI White Paper, ICLEI Global Report
- Carcellar, N., Rayos Co, C., Hipolito, (2011) Addressing disaster risk reduction through community-rooted interventions in the Philippines: experience of the Homeless People's Federation of the Philippines. *Environment and Urbanization*, 23(2) 365-381
- Carmin, J. et al., (2012) Progress and Challenges in Urban Climate Adaptation Planning: Results of a Global Survey. Cambridge, MA: MIT
- Ciplet, D., et al. 2012, The eight unmet promises of fast-start climate finance, IIED Briefing, Nov.
- Craeynest, L., (2010) Business as unusual Direct Access: Giving power back to the poor?, Caritas Internationalis /CIDSE
- Davis, J. and Tan, C., (2010) Tackling climate change through adaptation finance in the Least Developed Countries: Is the LDC Fund still fit for purpose?, UNCTAD
- Dodman, D., et al., (2013) Understanding the nature and scale of urban risk in low- and middle-income countries and its implication for humanitarian preparedness, planning and response. Prepared for the British Department for International Development (DFID)
- Dodman, D. and Satterthwaite, D., (2008) Institutional Capacity, Climate Adaptation and the Urban Poor. *IDS Bulletin*, 39(4)
- Douglas, I, et al., (2013) Unjust waters: climate change, flooding and the urban poor in Africa. *Environment and Urbanization* 20 (1): 187-205
- Feiden, P., (2011) Adapting to Climate Change: Cities and the Urban Poor, International Housing Coalition
- Feroze, S., (2013) One Small Change, an interview with Dr David Satterthwaite, in the Dhaka Courier, Bangladesh, Thursday, 22 August 22 2013
- Hannan Khan, S.M.H., Huq. S. and Shamsuddoha, Md., (2011) The Bangladesh National Climate Funds, LDC Paper Series, ecbi & IIED
- Hardoy, J., and Pandiella, G., (2009) Urban poverty and vulnerability to climate change in Latin America, *Environment and Urbanization*, 21 (203)
- Hedger, M., (2011) Climate Finance in Bangladesh: Lessons for Development Cooperation and Climate Finance at National Level, Working Paper, EDC 2020
- Honkaniemi, N., (2011) Storm on the Horizon? Why World Bank Climate Investment Funds Could Do More Harm Than Good, European Network on Debt and Development (Eurodad)

- Huairou Commission (2010). The Community Resilience Fund. "Preparing with Grassroots Women to Fast Track Risk Reduction and Climate Change Adaptation Initiatives". Huairou Commission and GROOTS International
- Huq, S. and Ayers, J., (2008a) Supporting Adaptation to Climate Change: What Role for Official Development Assistance? IIED
- Huq, S. and Ayers, J., (2008b) Streamlining Adaptation to Climate Change into Development Projects at the National and Local Level in Financing climate change policies in developing countries. Compilation of briefing papers, European Parliament, Economic and Scientific Policy
- IFRC (2010) World Disasters Report: Focus on Urban Risk, International Federation of Red Cross and Red Crescent Societies. Geneva
- Jones, A., (2009) Pro-Poor Governance of Global Adaptation Funds – a discussion paper, CARE/Germanwatch/Bread for the World
- Jones, L., et al., (2012) Coding and tracking adaptation finance: lessons and opportunities for monitoring adaptation finance across international and national scales, ODI
- Manandhar, L., (2002) Shadows of Development: Housing and the Urban Poor (An experience from Vishnumanti Link Road Project). Lumanti Support Group for Shelter. Kathmandu, Nepal
- Manandhar, L., Gurung, S., (2008) New Beginnings: Housing and the Urban Poor. A case Study of Kirtipur Housing Project. December 2005. Lumanti Support Group for Shelter
- Manda, M. Z., (2007) Mchenga - urban poor housing fund in Malawi, *Environment and Urbanization*, 19 (2), 337-359
- Mitlin, D., (2013) Locally managed funds: a route to pro-poor urban development, IIED Briefing May 2013, IIED
- Mitlin, D., (2011) International funds meet grassroots leadership. *Reflect & Act*. December 2011. IIED
- Mitlin, D. (2008a) Urban poor funds: development for the people by the people. IIED Poverty Reduction in Urban Areas Series. Working Paper 18
- Mitlin, D., (2008b) With and beyond the state – co-production as a route to political influence, power and transformation for grassroots organizations. *Environment and Urbanization*, 20(2)
- Mitlin, D. and Satterthwaite, D., (2007) Strategies for grassroots for control of international aid. *Environment and Urbanization*, 19(2) 483-500
- Mitlin, D. and Satterthwaite, D., (2013) Urban Poverty in the Global South. Scale and Nature. New York: Routledge
- Moser, C., et al (2010) Pro-Poor Adaptation to Climate Change in Urban Centers: Case Studies of Vulnerability and Resilience in Kenya and Nicaragua, The World Bank
- Müller, B., (2008) International Adaptation Finance: The Need for an Innovative and Strategic Approach, Oxford Institute for Energy Studies
- O' Sullivan, R. et al., (2011) Creation and Evolution of Adaptation Funds, *Climate Focus/WWF*
- Parry, M. et al., (2009) Assessing the costs of adaptation to climate change: A critique of the UNFCCC estimates, IIED
- Patel, M. and Brown, L. (2013) Strengthening Ownership and Effectiveness of Climate Finance, *WRI Insights* – available at <http://insights.wri.org/news/2013/05/strengthening-ownership-and-effectiveness-climate-finance>
- Satterthwaite, D., (2013) 8 points on financing climate change adaptation in urban areas, IIED Blog entry 20 June 2013 – available at <http://www.iied.org/8-points-financing-climate-change-adaptation-urban-areas>
- Satterthwaite, D., (2001) Reducing urban poverty: constraints on the effectiveness of aid agencies and development banks and some suggestion for change. *Environment and Urbanization*, 13 (1) 137-158
- Satterthwaite, D., Rethinking finance for development in city 'slums', IIED Blog Entry 12 October 2012 – available at <http://www.iied.org/rethinking-finance-for-development-city-slums>
- Satterthwaite, D., Bartlett, S., Cabannes, Y., Brown, D., (2012) The role of Local and Regional Authorities in the UN Development Agenda Post-2015. Prepared for (United Cities and Local Governments)
- Schensul, D. and Dodman, D., (2013) Populating Adaptation: Incorporating Population Dynamics in Climate Change Adaptation Policy and Practice. In: *The Demography of Adaptation to Climate Change*, G. Martine and D. Schensul (eds). New York, London and Mexico City: UNFPA, IIED and El Colegio de México
- SDI (2011) International Urban Poor Fund International. Financing Facility of Shack/Slum Dwellers International. 2011 Annual Report. <http://www.sdinet.org/media/upload/documents/UPFIAnnualReport2011.pdf>
- Smith, Joel B., et al., (2011) Development and climate change adaptation funding: coordination and integration', *Climate Policy*, 11 (3)
- Tacoli, C., (2013) Urban poverty, food security and climate change, IIED Briefing, March 2013

Trujillo, N.C. and Nakhooda, S., (2013) The effectiveness of climate finance: a review of the Adaptation Fund, ODI Working Paper No. 373, ODI

UN-Habitat (2011) Cities and Climate Change Initiative Policy Note 1

UN-Habitat (2010) Nepal Urban Housing Sector Profile

United Nations (2013) The Millennium Development Goals Report 2013, United Nations

Wilbanks, T.J., et al. (2007) in Climate Change: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, UK

World Bank (2010) Economics of Adaptation to Climate Change: Synthesis Report

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Acronyms

ACCA	Asian Coalition for Community Action
ACHR	Asian Coalition for Housing Rights
AF	Adaptation Fund
AFB	Adaptation Fund Board
AMP	Malawi Aid Management Platform
BCCRF	Bangladesh Climate Change Resilience Fund
BCCTF	Bangladesh Climate Change Trust Fund
CCODE	Centre for Community Organisation and Development
CER	Certified Emission Reduction
CDF	Community Development Fund
CDM	Clean Development Mechanism
CSO	Civil Society Organisation
DFID	Department for International Development
FM	The Financial Mechanism of the UNFCCC
FONERWA	National Climate and Environment Fund
GEF	Global Environment Facility
IIED	The International Institute for Environment and Development
KMC	Kathmandu Metropolitan City
LDC	Least Developed Country
LDCF	The Least Developed Countries Fund
MDB	Multilateral Development Bank
MoU	Memorandum of Understanding
NAPA	National Adaptation Programmes of Action
NIE	National Implementing Entity
ODA	Official Development Assistance
PPCR	Pilot Program for Climate Resilience
SCCF	The Special Climate Change Fund
SDI	Shack/Slum Dwellers International
UCSF	Urban Community Support Funds
UNFCCC	United Nations Framework Convention on Climate Change
UPFI	Urban Poor Fund International

There is an urgent need to review and improve the means for funding adaptation to climate change in urban areas. This paper examines international, national and municipal mechanisms for financing adaptation, and reveals the systemic barriers that prevent money being channelled into the hands of low-income and highly vulnerable urban residents in low- and middle-income countries, and hinder effective urban adaptation. At the same time, a number of highly organised, pro-poor, locally managed funds are being pioneered across a number of cities in low- and middle-income countries. Bottom-up planning and decision-making is emerging as a potential complement to the ineffective top-down financing models, and offers a viable approach to bridge the gap between low-income urban residents and the agencies that claim to support them.

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