

STEERING INTERNATIONAL ADAPTATION FINANCE TOWARDS THE LOCAL LEVEL

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List of Abbreviations

ACCA	Asian Coalition for Community Action	CCC	Climate Change Commission
AECF	Africa Enterprise Challenge Fund	CCRIF	Caribbean Catastrophe Risk Insurance
AF	Adaptation Fund		Facility
AfDB	African Development Bank	CDC	Community Development Council
ANICT	Agence Nationale d'Investissement des	CDD	Community-Driven Development
	Collectivités Territoriales	CFU	Climate Funds Update
BaU	Business as Usual	CFW	Cash-for-Work
BMU	Federal Ministry for the Environment, Nature	CIF	Climate Investment Funds
	Conservation, Building and Nuclear Safety	CLLD	Community-led local development
	of Germany	CLSF	Community Livelihood Support Fund
BRR	Agency for the Rehabilitation and Recon-	CPI	Climate Policy Initiative
	struction of Aceh and Nias	CSI	Climate Services for Infrastructure
CAF	Climate Adaptation Funds		Investment
CAP	Common Agricultural Policy	CS0	Civil Society Organisation
CBA	Community based Adaptation	DCF	Decentralising Climate Funds
CBA12	Community Based Adaptation	DFID	UK Department for International
	Conference 2017		Development
CBD	Community based Development	DFP	Decentralised Financing Policies
CCALoC	Climate Change Adaptation Line of Credit	DGM	Dedicated Grant Mechanism
СВО	Community based Organisation	EAFRD	European Agricultural Fund for
CCAP	Center for Clean Air Policy		Rural Development

EbA	Ecosystem-based Adaptation	MRV	Measuring, Reporting and Verification
EBRD	European Bank for Reconstruction and	NAIS	National Agricultural Insurance Scheme
	Development	NAPA	National Adaptation Programs of Action
EDA	Enhanced Direct Access	NCCAP	National Climate Change Action Plan
EFJ	Environmental Foundation of Jamaica	NCCSP	Nepal Climate Change Support Programme
EMFF	European Maritime and Fisheries Fund	NCF	Nordic Climate Facility
EPWP	Expanded Public Works Programme	NDA	National Designated Authority
ERDF	European Regional Development Fund	NEF	Near East Foundation
ESF	European Social Fund	NFSCC	National Framework Strategy on
EU	European Union		Climate Change
FARNET	Fisheries Areas Network	NGO	Non-governmental organisation
FFW	Food-for-Work	ODA	Official Development Assistance
FIP	Forest Investment Program	ODI	Overseas Development Institute
FLAG	Fisheries Local Action Groups	OECD	Organisation for Economic Co-operation
GCF	Green Climate Fund		and Development
GEF	Global Environment Facility	PBCRG	Performance-Based Climate Resilience
GIIF	Global Index Insurance Facility		Grants
GIZ	German Corporation for International	PES	Payment for Ecosystem Services
	Cooperation (Deutsche Gesellschaft für	PPCR	Pilot Program for Climate Resilience
	Internationale Zusammenarbeit)	PSD	Participatory Scenario Development
IDB	Inter-American Development Bank	PSF	People's Survival Fund
IED	Innovation, Environnement et Développe-	PWP	Public Works Programme
Afrique	ment en Afrique	REDD	Reducing Emissions from Deforestation
IIED	International Institute for Environment		and Degradation
	and Development	SANBI	South African National Biodiversity Institute
IKI	International Climate Initiative	SCCAF	Special Climate Change Adaptation Fund
IL0	International Labour Organization	SCF	Strategic Climate Fund
IPCC	Intergovernmental Panel on Climate Change	SDI	Shack/Slum Dwellers International
JCDT	Jamaican Conservation and	SEWA	Self Employed Women's Association
	Development Trust	SGF	Small Grants Facility
JNSBL	Jamaica National Small Business Loans	SGP	Small Grants Programme
LDC	Least Developed Countries	SME	Small and medium-sized enterprises
LGCC	Local Governments and Climate Change	SPCR	Strategic Programs for Climate Resilience
LGU	Local Government Units	SUT	Sustainable Urban Transport
LoCAL	Local Climate Adaptive Living Facility	UK	United Kingdom
LPC	Loan Protection Cover	UN	United Nations
LPP MASAF	Livelihood Protection Policy	UNCDF	United Nations Capital Development Fund
MASAF MDB	Malawi Social Action Fund Multilateral Development Bank	UNDP UNEP	United Nations Development Programme United Nations Environment Programme
MDF	Multi-Donor Fund for Aceh and Nias	UNFCCC	United Nations Framework Convention on
M&E	Monitoring and Evaluation	UNFCCC	Climate Change
MEbA	Microfinance for Ecosystem-based	UPFI	Urban Poor Fund International
MEDA	Adaptation	VRA	Vulnerability and Resource Assessment
MFI	Microfinance Institutions	WRI	World Resources Institute
M4P	Making Markets Work for the Poor	ZHPF	Zimbabwe Homeless People's Federation
MICF	Malawi Innovation Challenge Fund		
MFI	Microfinance Institutions		
MLG	Multi-Level Governance		
MoA	Ministry of Agriculture		
MoE	Ministry of Environment		
MoF	Ministry of Finance		
-	•		

EXECUTIVE SUMMARY

Climate change adaptation has become a central concern for sustainable development and economic policy, especially in developing countries. At the same time, financing for adaptation amounted to USD 22 billion in 2016, representing only a small share of the USD 455 billion of tracked climate investments in that year (Climate Policy Initiative 2018) and therewith by far falling short of projected financing needs of USD 140 billion to USD 300 billion annually for adaptation in developing countries alone by 2030 (UNEP 2017). Not surprisingly, the provision of climate finance, especially for adaptation needs in vulnerable and local communities, is considered a key element and political goal in the international climate change space.

Effectively steering these resources to the local level (sub-national levels ranging from community- to district-level) where they are most needed and are likely to have the greatest impact remains oftentimes a challenge. This is particularly alarming as vulnerabilities to the effects of climate change are highly localised and/or regional which makes adaptation a mainly place-based activity. Despite being most in need of effective adaptation, local entities often lack financial resources to plan and implement adaptation measures.

In this paper, several **key** challenges for channelling money from the international to the local level have been identified through expert interviews and desk research. They can roughly be grouped in three categories:

- Firstly, significant amounts of funding are not efficiently and effectively directed to the local level due to finance being lost on the way in complex processes and a lack of addressing the local level with the money provided.
- Secondly, available funds that are addressed to the local level are not always adapted to local needs.
- Thirdly, there often is a lack of local structures and capacities that prevent local actors from either effectively absorbing dedicated funds or from clearly communicating and raising demand and need for adaptation finance to the allocation decision-makers.

With the provision of finance for adaptation needs in vulnerable and local communities being a key element and political goal of the Paris Agreement, it is in the interest of international donors to have a good understanding of the most effective use of the resources provided for climate change. Therefore, this paper aims to provide adaptation finance practitioners, project managers and experts from donor agencies, development finance institutions, multilateral funds, and programmes with a stocktake and analysis of existing specific strategies or operating principles within programmes that aim to channel funding effectively through vertical administrative levels from the international to the local level where it is meant to unfold maximum impact (so-called "elevator function"). To this end, the analysis includes existing elevator functions from within adaptation finance and from sectors other than adaptation - e.g. in development, climate mitigation, environment protection, or agriculture.

There is great variance in what an elevator function can look like, depending on the respective challenge it intends to address. The **paper identifies five categories of elevator functions** that appear to have the greatest potential for effectively reaching specific target groups at the local level:

- Direct investments and direct access channels provide funding as directly as possible to the local level by overcoming as many barriers and administrative layers as possible between the source of funding and the target communities.
- Locally administered funds foster allocation decisions of available funds at the local level through decentralisation elements, cooperation with intermediaries and the involvement of local knowledge on context factors.
- Participatory funding structures, as a third category, support better channelling of funds to the local level by involving more local players and communities in key decisions of the respective financing instrument.
- Funding instruments that allocate funds according to competitive elements, using specific funding criteria such as local embeddedness of a project or needs assessments can identify the most applicable projects in a fair and objective process that is open to communities and local projects.
- Performance-based funding that works with performance criteria throughout a longer time horizon

allows for smaller pilot programmes in order to determine the right communities or projects to support throughout the disbursement process in different phases and tranches.

In addition, **enabling activities and tools beyond the elevator functions** per se that are needed to improve effective channelling of funds to the local level have been identified:

- Local actors should be empowered through the provision of capacity building and technical assistance to local level representatives and organisations so that they can better access and make use of available adaptation financing options, and communicate their adaptation and financing needs more clearly. Capacity building is an essential prerequisite in order to improve budget allocation structures and, subsequently, ensure the efficient implementation of steering methods. The sequence in which this process occurs is certainly very context-specific, however, structural developments and professional training are two closely intertwined components that should always be taken into account at the same time.
- Furthermore, grouping and aggregating local level entities as well as developing networks can strengthen their capacity and position through cooperation and collective advocacy.

It is worth noting that this paper does not provide fully conclusive results but rather gives a light overview of potentially suitable elements of elevator functions. It should, hence, be the first step for more far-reaching, in-depth research into the identified core aspects. In addition to further research, concrete next steps comprise the consideration of a set of recommendations for action.

Further research could focus on following aspects:

- More emphasis should be put on developing tangible strategies of how these elevator functions can be used in practice.
- More thinking should go into identifying the right elevator functions for specific circumstances and target groups.
- It should be explored how some of the learnings could be integrated in existing adaptation finance tools to facilitate quick wins.
- Different options of how the presented elements could be bundled most effectively should be modelled.

- All of the options that are considered for implementation should be discussed with target groups in developing countries to further refine the ideas and identify weaknesses.
- A guideline for practitioners who are at the planning stage of adaptation measures could be developed, based on the paper at hand. This guideline could be structured as a significantly shorter step-by-step guide that refers back to this scoping paper and its analysis wherever necessary.

Recommendations for action for adaptation finance practitioners, project managers and experts from donor agencies and multilateral finance institutions include:

When developing funding strategies

- Integrate new elevator functions in existing financing instruments. The application of elevator functions does not entail the need to develop completely new financing instruments.
- Enhance transformational adaptation finance through the integration of innovative funding principles from other sectors.
- Apply specific thematic or community-prioritised investment windows and fund allocation criteria.
- Consider introducing direct access modalities for entities at community- or district-level.

When deciding on the allocation of financial assets

- Promote local ownership by transferring budget control to local entities.
- Encourage local participation. Even if funds are not administered by local entities, encouraging their participation and involving them in strategic or allocation decisions can strengthen the channelling of adaptation financing.
- Encourage inclusive and innovative projects through competitive and performance-based funding criteria.





1.1 Background

In recent years, climate change adaptation has become a central concern for sustainable development and economic policy, especially in developing countries. Amongst other things, this is reflected in the establishment of a global goal on adaptation in the Paris Agreement (comp. Article 7). At the same time, financing for adaptation amounted to USD 22 billion in 2016, representing only a small share of the USD 455billion of tracked climate investments in that year (Climate Policy Initiative 2018) and therewith by far falling short of projected financing needs of USD 140 billion to USD 300 billion annually for adaptation in developing countries alone by 2030 (UNEP 2017). Not surprisingly, the provision of climate finance, especially for adaptation needs in vulnerable and local communities, is considered a key element and political goal in the international climate change space.

Given that climate vulnerabilities are highly localised and context-specific and thus require local action, effective financial instruments and distribution of public climate finance received at the national level need to entail suitable mechanisms that ensure that international funding for adaptation reaches the local level. Despite being most in need of effective adaptation, local entities (e.g. municipalities, companies, households) often lack financial resources to plan

and implement adaptation measures. In the context of the study at hand, the term local level comprises sub-national levels ranging from community level to district level, including municipalities. In this regard, households are only considered in aggregated form on community-level. At the same time, sub-national state-level should ideally only be considered in disaggregated form at district-level.

Against this background, the core of this paper is an overarching analysis of so called 'elevator functions'. The term is used to describe specific strategies or operating principles within programmes. Their aim is to channel funding effectively through vertical administrative levels from the international to the local level where it is meant to unfold maximum impact. By doing so, elevator functions intend to minimise the proportion of funding that gets lost on the way and to maximise the amounts that reach communities, municipalities, and districts with the greatest need for receiving adaptation financing. It is in the interest of international donors to have a good understanding of the most effective use of the resources provided for climate change.

There is great variance in what an elevator function can look like, but the guiding principle is that form follows function. The set of options ranges from

integration of local level entities and representatives in decision-making processes for funding allocation to specific disbursement criteria of funding mechanisms as well as to direct access investment mechanisms. The basic principles are normally either that the way through the different vertical layers is as efficient as possible or that the elevator function of the respective instrument finds a way to circumvent and skip some of the layers in order to allow for quick results on the ground.

Adaptation finance at community level cannot be addressed through international financing tools alone; the financing often flows via national structures and partly depends on national allocation decisions. Hence, local realities need to feed into government planning and public financial strategies through community-level input and local stakeholder participation. In many cases, a key problem for taking the local needs into account are the often limited capacities of local level representatives or entities to identify and especially to effectively communicate their adaptation finance needs (in the required form) to the international or national level. Therefore, beyond the elevator functions embedded within funding instruments, it is also important to look at how local structures and capacities can be strengthened.

Still, the bankable/investable allocation mechanisms practiced so far do not do justice to this necessity or do so only inadequately. Many instruments and institutions face challenges in steering the necessary resources to the local level or they are not easily accessible for communities and local projects and

programmes. Specifically, this paper addresses the following questions:

- What are the barriers for channelling adaptation finance towards the local level?
- What elevator functions exist in the area of climate (adaptation) finance and other sectors that help overcome such challenges and successfully channel finance from the international and national to the local level?
- What are potential implications at the national level for improving the channelling of international public adaptation finance through vertical government levels?
- What additional measures beyond financing instruments might be required to improve channelling funding to the local level?

The basis for the analysis was provided through a screening of various financial instruments, funds, and financing tools with regard to their respective elevator functions. The paper makes a distinction between instruments that already exist in the adaptation finance world and those that are being used in other sectors (see TABLE 1). To be open to as many forms and shapes of elevator functions as possible, the range of instruments covered in this analysis is very broad and ranges from concrete programmes and specific regional initiatives to broader categories of financial instruments. This extensive desk-based research was complemented by a set of expert interviews in order to gain additional first-hand insights (see Annex III List of Interviewees).

TABLE 1

Overview of analysed instruments

Instruments from the field of adaptation	Instruments from other sectors
Direct Access Modality of AF and GCF	World Bank's Community-Driven Development Programmes
People's Survival Fund (Philippines)	Direct Payments: The EU Common Agricultural Policy
"On budget, off treasury financing"	Public Works Employment Schemes
Pilot Program for Climate Resilience (PPCR) and Forest Investment Program (FIP)	Community-led Local Development (CLLD): European Maritime and Fisheries Fund (EMFF)
GEF Small Grants Programme	Frontier Funds
The Local Climate Adaptive Living Facility (LoCAL)	Cash Grant Distribution via Social Funds
Decentralised climate adaptation funds	Challenge Funds
Dedicated Credit Lines	Decentralised Financing Policies
Microfinance	Crowdfunding
Direct Climate Risk Insurance	Bonds

Following this logic, the paper aims to provide adaptation finance practitioners, project managers and experts from donor agencies, development finance institutions, multilateral funds, and programmes as the key target groups with a stocktake and analysis of existing elevator functions in existing financing instruments in order to provide insights to further enhance the effective channelling of adaptation finance to the local level. It is worth noting that this paper will not provide fully conclusive results but rather be the first step for more far-reaching, in-depth research into the identified core aspects.

The paper is structured as follows. In the next section, the discussion concerning adaptation finance is placed in the broader context of international climate change adaptation and development cooperation. The subsequent second chapter describes the current

status of adaptation financing structures and existing key challenges for reaching the local level. The third chapter covers the analysis of elevators for steering adaptation finance to the local level. This is split into a first part focusing on elevator functions within funding instruments and a second, shorter part, covering enabling activities beyond elevator functions that are important for making channelling funds to the local level more effective. The final chapter summarises the findings, draws conclusions from the analysis, points to next steps for further research, and provides recommendations for action to international donor agencies, development finance institutions as well as multilateral funds and programmes. The detailed analysis with an overview of all analysed funds and financing tools can be found in the Annex.

1.2 Context of the Debate

An analysis of elevator functions and the steering of adaptation finance should not be perceived as an isolated discussion but rather as being embedded in the wider context of theories, developments, and debates around climate action, sustainable development, and climate finance. This chapter provides a brief overview of relevant discussions and considerations that are relevant in this context.

Mitigation and adaptation are the two main elements of climate action and the essential foundation of managing climate risks (prevention and managing impacts of climate change) that should go hand in hand. Integrating both components is vital to develop approaches that link mitigation and adaptation with other societal objectives and co-benefits, reduce trade-offs between different sectors and objectives as well as create synergies and build on mutual benefits (IPCC 2014). This paper, however, focuses primarily on the adaptation dimension. The Intergovernmental Panel on Climate Change (IPCC) defines adaptation to climate change as "in human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects" (IPCC 2018). The overarching aim is to reduce vulnerabilities of people and places to both current and future risks and changes. Whereas mitigating climate

change necessarily needs to happen at a global scale, its impacts and vulnerabilities are mostly highly localised and/or regional and thus require local action. Hence, adaptation commonly creates local public goods that are context-specific and differ according to geographic variation in climate change impact (IIED 2017).

Furthermore, adaptation measures may be incremental or transformational in nature (Prairie Climate Centre 2017). Whereas incremental approaches involve building on and extending the efficiency of conventional practices for climate risk reduction and management, transformational adaptation leads to fundamentally new and innovative responses that address the root causes of vulnerability in a broader and more systemic way (Prairie Climate Centre 2017). In many contexts, vulnerabilities and risks may be so sizeable that they require transformational rather than incremental adaptation (Kates et al. 2012). Consequently, international donor agencies, development finance institutions, and multilateral funds and programmes should emphasise transparency, integration, flexibility, monitoring, continual learning and knowledge sharing to increase the likelihood of transformational adaptation occurring at the necessary and appropriate time (Prairie Climate Centre 2017).

By placing the prevention and reduction of vulnerability in the forefront, adaptation to climate change and general 'business as usual' (BaU) development

share central aims to reach the poorest and most marginalised communities. Even though both often apply common approaches, distinguishing BaU development from adaptation can allow providers and recipients of financial support to better allocate and track resources, and measure the return on investment or adaptation outcomes of projects1. On the downside, the distinction of adaptation from development often leads to 'stand-alone' adaptation measures being implemented instead of integrating them into standard sectoral policies, e.g. medium- and long-term planning and budgeting processes (Christiansen et al. 2016). However, many countries are increasingly focusing their adaptation efforts on multi-scale, cross-sectoral, and integrated strategies, moving away from an isolated project focus. Adaptation-oriented policy guidance such as the OECD's 'Mainstreaming Adaptation in National Development Planning'2 provides an overview of the international mechanisms to support the mainstreaming of climate change adaptation into development planning and policies in developing countries.

Including vulnerability to future climate change in the planning specifications of resilient infrastructure projects is of vital importance for developing countries affected by climate change. States must be able to independently develop climate information, advisory services and products (climate services) that are geared to the requirements of decision-making and planning processes. The Climate Services for Infrastructure Investment (CSI) Project³ by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, for instance, and other international initiatives address this challenge by offering guidelines on the institutional mainstreaming and practical design of value-added climate data for needs-based climate products. The establishment of an ecosystem of climate service providers is essential, meaning that particular attention must be devoted to sustainable cooperation structures between the relevant actors in the value chain, such as those providing and refining climate data, decision-makers, planners, and engineers.

Moreover, strengthening a multi-level governance (MLG) approach is indispensable in order to deliver climate resilience and facilitate the implementation of adaptation goals. MLG can significantly contribute to closing knowledge and information loops, leading to higher transparency and enhanced capacity building.⁴ With vulnerable and local communities being a key element and political goal of the Paris Agreement, MLG needs to be strengthened in a way that benefits the establishment of local structures and capacities and enables solutions which are consistent with local needs.

¹ For more information, see IISD publication on "Defining adaptation – and distinguishing it from other development investments"

² For more information, see Mainstreaming Adaptation in National Development Planning.

³ For more information, see Climate Services for Infrastructure Investment (CSI) Project.

⁴ For more information, see GIZ publication on "Facilitating the Implementation of NDC Adaptation Goals through enhanced Multi-level Governance"



STATUS OF ADAPTATION FINANCE STRUCTURES AND CHALLENGES FOR REACHING THE LOCAL LEVEL

Based on expert interviews as well as additional desk research, key challenges that currently hinder the effective channelling of adaptation finance to the local level have been identified. The challenges, thus, represent the views of different developing country representatives at the local and national level, international donors and technical experts. Some challenges make

it difficult for local actors to access available finance, while others prevent international entities from reaching the local level. The following hurdles often fall into both categories. To put these challenges into context, it is important to first understand the status quo of adaptation finance flowing from the international to the local level via the different government layers.

2.1 Current Status of Adaptation Finance Structures

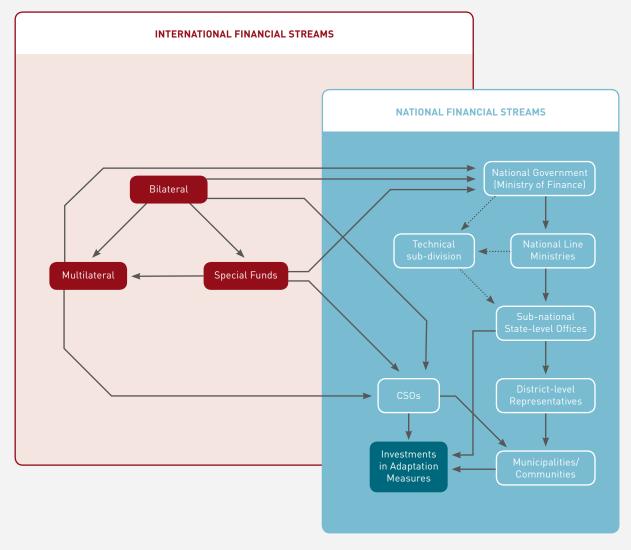
Many players and layers are involved as adaptation finance flows from the international to the local level in developing countries. Even though there are obviously varieties between processes in different countries, the rough basic principles remain similar across many countries and thus create analogue challenges. An overview of different process options is illustrated in FIGURE 1.5

One of the most common processes starts with multilateral development banks (e.g. World Bank), donor governments, or special funds paying out funding

5 Figure adapted by author according to: World Resources Institute 2013.

to the national financial administration of the target country, either to the Ministry of Finance (MoF) or to the Central Bank/Treasury and from thereon to the MoF. The MoF then further allocates the funds to the respective line ministries on the national level, such as the Ministry of Environment (MoE) or the Ministry of Agriculture (MoA). In many cases, the line ministries then distribute funds further across the respective technical sub-divisions on national level, such as the Directorate of Climate Change or the Directorate of Forestry. These national technical sub-divisions further allocate the finances to their sub-national state-level offices, which then distribute the funds across the

FIGURE 1
(Inter)national Adaptation Finance Flow Model



Source: Authors' own depiction

respective district-level representatives. Only from there does the pay-out to communities in need or local projects usually happen if money flows through the national system.

There are several variations to this process. For example, not all countries and line ministries have technical directorates under the ministry structure and not all countries and line ministries use all vertical layers mentioned above (national level, state-level, district-level). Admittedly, it is not uncommon that there is a difference between how relationships and financial flows should ideally function and how they are carried out in practice (World Resources Institute, Oxfam 2015). Another crucial point to note is that there are huge variations with regard to the discretion and

flexibility each player/level holds in how they can allocate funds to the next level, depending on conditions set by the respective donors. The "Strategic Priorities, Policies and Guidelines of the Adaptation Fund", for instance, set out that funding will be available for projects and programmes at national, regional and community levels, while proposals have to show consistency with national sustainable development strategies, including, national development plans, poverty reduction strategies, national communications, and national adaptation programmes of action, and other relevant instruments (Adaptation Fund 2017b). Hence, if and how these national strategies are developed significantly affects the way how funding can flow through the national system.

Frequently, technical assistance is delivered by private-sector consulting firms or civil society organisations (CSO) under commercial contracting arrangements. In this case, donors provide funding directly to CSOs which then channel the money through their internal systems and allocate the funds to the target districts, communities or projects at the local level. Alternatively, some donors pay funds directly to sub-national state-level or (rarely) district-level institutions rather than going via the national level. This is the case

for direct access facilities that enable national and regional entities to directly receive and manage climate financing.

The complexity of the described processes and the many layers involved already point to the challenges related to channelling adaptation finance to the local level. It is important to note though that the many steps involved are a risk for funding loss on the way and checks and balances tool for preventing misappropriation of funds and corruption at the same time.

2.2 Challenges for Reaching the Local Level

As mentioned above, several key challenges for channelling money from the international to the local level have been identified through expert interviews and desk research. They can roughly be grouped in three categories:

TABLE 2

Overview of challenges

Too little funding effectively and efficiently directed to the local level

Available funds not adapted to local needs

Lack of local structures and capacities

Significant amounts of funding are not efficiently and effectively reaching the local level as finance is lost on the way – either due to corruption and misappropriation in recipient countries, complex administrative processes, or resulting from a lack of directly addressing local entities with available money.

Available funds that are addressed to the local level are not always adapted to local needs. It is often difficult for local entities to access international funds and priorities of donors and conditions of funds not always match the requirements and realities on the ground at the local level. This is partly explained by insufficient representation and consultation of local level actors in allocation decisions.

There often is a lack of local structures and capacities that prevent local actors from either effectively absorbing dedicated funds or from clearly communicating and raising demand and need for adaptation finance to the allocation decision-makers.

2.2.1 Too Little Funding Efficiently and Effectively Directed to the Local Level

- Finance is lost on the way: (Limited) financial resources are further reduced, by the need to cover the administrative costs of the climate finance architecture and to compensate for the often inefficient budget allocation. Moreover, corruption and misappropriation in recipient countries increase the risk of finance getting lost on the way. Hence, transformative adaptation must include both (a) a change in the legal budget distribution mechanisms, as well as (b) efficient measures against corruption. The approaches presented in this paper aim at contributing
- to a positive development in this context; however, addressing corruption as a domestic responsibility goes beyond the scope of this paper and will be disregarded in the following analysis.
- a. Climate finance facilities such as the Green Climate Fund (GCF) or the Adaptation Fund (AF) indicate important costs incurred by their secretariats and governing bodies. For example, these costs amount to around USD 150,000 per project approved for the GCF and USD 600,000 for the AF (World Resources Institute 2017). The path from the international to the local level is long and winding (see chapter 2.1 and FIGURE 1). For

example, research carried out by Transparency Maldives in 2015 shows that climate finance flows into the Maldives through complex channels involving grants from multilateral and bilateral funds (Transparency International 2018a). Not only the cost of the administration but also the risk of misdirection of funds throughout the process due to inadequate budget allocation and the lengthiness of the process are problematic as they prolong the time between an identified need in a specific region and pay-out to local communities or projects. Without a strong system of governance that streamlines processes for fund disbursement, project implementation and information sharing, and thereby facilitates the monitoring of fund use, the resources often do not end up where they are most needed (Transparency International 2018a). It is worth noting that this creates a trade-off as these governance and monitoring systems might increase the abovementioned costs of governing bodies even further.

- b. Developing solutions to the problem of corruption in beneficiary countries is a complex task which predominantly falls within the domestic responsibilities of states. Providing off-budget support to bypass loopholes in the public financial management system, introducing checks and balances, regulating state salaries, and other measures are valuable approaches, however, their assessment exceeds the scope of this analysis.
- Available money is not addressed at the local level: International climate finance often comes to a standstill at the national level, while local entities are typically not direct partners of donors and local activities are rarely targeted. For instance, after analysing adaptation finance flows in Nepal, the Philippines, Uganda, and Zambia, the World Resources Institute (WRI) concluded that in all four countries, the national government was always the main recipient of adaptation finance (World Resources Institute 2013). Based on the Climate Funds Update (CFU) database which covers public finance from all major international and some regional and national climate funds, IIED estimates that out of the total USD 17.4 billion, less than 10% (USD 1.5 billion) were approved for locally focused climate change projects between 2003 and 2016. Of this, as opposed to general trends in overall climate finance, more than half has been approved for locally based adaptation, versus less than a quarter for general mitigation (IIED 2017). Investment strategies of climate funds predominantly

prioritise large-scale results. Furthermore, most climate funds are only accessible through international intermediaries. Where funds like the GCF can provide direct access for developing countries, they still mostly go through the United Nations (UN) and multilateral banks, with no specific priority to reach local actors (IIED 2017).

2.2.2 Available Funds not Sufficiently Adapted to Local Needs / Realities

- · It is too difficult for local entities to access international funds: Donors have clear access rules in order to select suitable projects and reduce risks (e.g. corruption, loan default, etc.). Many local entities cannot comply with these due to a lack of necessary resources (time, staff, technical knowledge, etc.). Generally, three different access mechanisms can be distinguished: direct access, provided that the entity gets accredited by meeting specified requirements; international access, whereby finance is channelled through accredited international entities (e.g. multilateral development banks or the UN) or open calls that allow all eligible organisations to directly submit funding requests (IIED 2017). The complexity and fragmentation of the institutional landscape (Paulais and Pigey 2012) and demanding standards to obtain direct access to international climate funds have been challenging for most local entities in developing countries and sometimes an impediment to accessing international climate funds. Consequently, even though e.g. the GCF and the AF offer direct access modalities, so far, neither of the two funds works through sub-national entities to channel its resources to projects and programmes (Green Climate Fund 2018b).
- Funding priorities are not relevant / realistic for local entities: Development models and priorities are not always sufficiently aligned between levels - funding criteria and targeted outcomes do not always meet local needs. At the same time, adaptation is often not the primary objective of local entities, hence, specific "adaptation finance" is not always perceived to fully serve their purposes: If a project does not have adaptation as the primary goal, states or municipalities usually have to apply for funding from multiple sources (for example, to the AF for the adaptation costs and to the World Bank for regular project costs). This can make the process of identifying and applying for finance very difficult, and exemplifies the need for more flexibility and stronger efforts on the side of the international donors. For

example, in eThekwini (metropolitan municipality of South Africa), climate change has long had lower priority than other more urgent social and environmental matters. Although progress has been substantial and political will has been strengthened, eThekwini, like all of South Africa, still has issues with unemployment, poverty, inequality, housing backlog and HIV/Aids infections. As some departments are less aware of the severe challenges of climate change, they place higher priority on short-term economic development (Roberts 2008). In Durban, for instance, adaptation programmes have only worked out if the measures also strengthened the employment situation.

- Lack of involvement of local actors in decision making / funding allocation: Planning and allocation processes often do not involve stakeholders across the appropriate levels of governance and across civil society. The lack of community-level input and participatory decision making, both during planning and implementation phases, often leads to systematically poor disclosure of information concerning local needs and conditions on-site. In Bangladesh's Baguna district, for instance, a cyclone shelter has been constructed on the other side of a river that is not crossable during bad weather. Hence, it is impossible to reach for communities in that area. Insufficient consultation and involvement frequently causes new challenges that local communities have to deal with in order to adapt to climate change risks and constrains financial flows towards where they are needed at the local level (Transparency International 2018b).
- Insufficient attention to vulnerable sections of the **population**: Climate change places a particularly heavy burden on those sections of the population, that are most reliant on natural resources for their livelihoods and/or who have the least capacity to respond to natural hazards. Accordingly, marginalised groups like women, children, the elderly, and the impoverished are commonly more negatively impacted by climate change. Integrating considerations of e.g. gender into medium- and long-term adaptation projects by establishing a dedicated agenda item is critical to ensure that adaptation is effective and implementable on the ground and does not exacerbate inequalities and other vulnerabilities. However, women's unequal participation in decision-making processes and labour markets compound inequalities and often prevent women from fully contributing to climate-related planning, policy-making, and

implementation (UNFCCC 2019). Although raising attention to the importance of an inclusive gender-dimension is indispensable, it is not the key focus of the analysis presented in this paper.⁶

2.2.3 Local Structures and Capacities not Sufficiently Developed

· Lack of capacity and skills in local institutions: Skills gaps among public stakeholders and sub-national or local entities are often a barrier to financing the local level, with concerns over mismanagement as well as monitoring and evaluation of financial processes (IIED 2016c). Both Bangladesh and the Maldives identified climate finance transparency, accountability, integrity, and coherence as some of the most contentious problems and mentioned a strong need for accountability mechanisms, such as independent oversight bodies, as well as improved monitoring and evaluation processes to govern climate finance effectively (Transparency International 2018a). In some cases, adaptation finance has contributed to strengthening and supporting the use of national institutions to channel funding, however, there is scope to generally enhance the delivery of funding through national financial structures (World Resources Institute 2013).

Recipient governments and responsible stakeholders at the local level often lack the technical capacity to design and develop project or programme proposals (OECD 2015). Moreover, due to limited observational networks, developing countries that are most vulnerable to the impact of climate change often face low availability of scientific data on socio-economic statistics and reliable estimates of economic and climate phenomena to assist investment decisions (UNFCCC 2016). This problem is particularly serious when considering disaggregating available data to the local level in order to take more specific funding decisions. In Uganda, apart from the insufficient involvement of local communities and communication disconnect, limited technical capacity, political interference, and absence of functional implementation structures across national, district, and community levels constrained climate change adaptation: Ministry and local government

⁶ For a closer analysis of gender-responsive adaptation approaches see NAP Global Network, for example Dazé, A. & Dekens, J. (2018). Towards Gender-Responsive National Adaptation Plan (NAP) Processes: Progress and Recommendations for the Way Forward. International Institute for Sustainable Development. Winnipeg, Canada. Retrieved from www.napglobalnetwork.org

officials, non-governmental organisation (NGOs), and civil society representatives attested that they did not have the sufficient skills or practice to enable long term planning and modelling to subsequently establish adequate adaptation projects and policies (Ampaire et al. 2017).

- Lack of aggregation mechanisms: Traditional financing providers, such as the multilateral development banks, are less able to finance small-scale projects directly, given the higher transaction costs (CCAP 2017; IIED 2017). Yet, there is a lack of mechanisms for aggregating small-scale projects to a manageable size.
- · Lack of "serious" demand for international finance: Awareness of the need for adaptation and sources of funding is often low at the local level and many times even on levels above. Adaptation is still considered in the periphery of other development issues, e.g. eminent disaster response. There is limited awareness of the potential impacts of climate change and adaptation options, especially among local authorities and non-state stakeholders (UNFCCC 2016). For instance, even though climate change funds are available through donors and development partners in Uganda, accessing these funds requires that climate change issues are clearly articulated. Such skills are rare and local officials therefore mostly fail to secure climate funds from non-government sources. However, as the central government's budgets are insufficient and available national funds are tagged to centrally designated priorities that do not reflect local priorities, district officials depend on international finance to combat climate change (Ampaire et al. 2017).



ANALYSIS OF ELEVATOR FUNCTIONS
FOR STEERING ADAPTATION FINANCE
TO THE LOCAL LEVEL

This chapter summarises the key findings resulting from the screening of different elevator functions that are supposed to or do indeed channel funding to the local level. The chapter is split into one part that looks at actual elevator functions in existing instruments that channel funding effectively through vertical administrative layers from the international to the local level, and a second part that looks at the enabling activities and tools beyond financial elevator functions per se that are needed to improve effective channelling of funds to the local level.

The solutions in the form of categories of elevator functions (see FIGURE 2 presented in this chapter) address relevant challenges from Chapter 2.2 and refer to existing instrument examples that make use of the respective elevator logic. Three of these functions refer to access channels and management structures of funding processes and two of them to allocation modalities. Consequently, they roughly relate to each other in a matrix logic that allows different combinations of the two dimensions (see FIGURE 2).

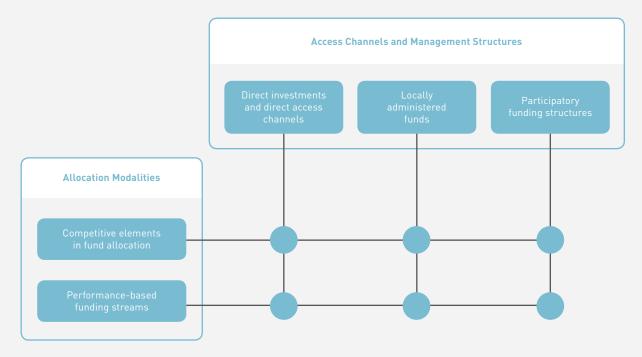
3.1 Analysis of Elevator Functions in Different Financing Instruments

In this section, different elevator functions are discussed that have been identified through the analysis of existing funding instruments within and outside the adaptation and climate finance world. We focus on the logic of the different elevator functions rather than on the specific funds or financing instruments (that are included in Annex I and are the basis of the analysis) — references to relevant funds and instruments will be made though. For each instrument we look at:

- How exactly does the instrument work? Who can be reached with its elevator function? Who is it aimed at?
- What are benefits of the approach and what challenges does it tackle?
- What can be limitations or challenges with regards to the mechanisms?
- Can the approach be applied to adaptation finance at scale?
- Examples of analysed funds and instruments that entail elements of the respective elevator function

FIGURE 2

Categories of Elevator Functions



Source: Authors' own representation

Regarding the analysis of existing financing instruments, the question of how to measure their respective effects and degree of achievement needs to be borne in mind. Monitoring and Evaluation (M&E) as well as Measuring, Reporting and Verification (MRV) are both necessary at the operational and political level, in order to effectively assess the programmes that are now reaching maturity (Christiansen et al. 2016). Processes that follow up on individual projects for the purpose of documenting outputs and outcomes are important to donors and/or allow drawing lessons that can be used to improve adaptation activities. While the importance of consistent M&E processes for a meaningful analysis of best-practices is recognised by the authors, a closer examination of this topic would exceed the scope of this study.7 It is worth mentioning at this point though that despite the value of effective MRV, such activities might also increase costs and administrative burden as well as decrease efficiency of respective activities and projects.

7 For a more detailed discussion on M&E for adaptation see IIED publication on "How integrated monitoring and evaluation systems can help countries address climate impacts"

3.1.1 Direct Investments and Direct Access Channels

- · Functioning of the elevator: The analysis of different financing instruments has shown that one promising way of effectively reaching local levels is through tools that provide funding as directly as possible to the local level. This elevator function can be best described as direct investments or direct access channels. Elements of this logic can be found in several of the described funding tools in Annex I. The basic principle is to overcome or skip as many barriers and layers as possible between the source of funding and the target communities and projects through more direct channels. It aims to provide opportunities to local entities and projects with a need for financing to directly access available funds without lengthy and complex processes and multiple administrative levels in between. This methodology can be particularly useful in cases where a rather quick disbursement to target entities is needed.
- Benefits of the elevator and challenges tackled: As such, this elevator function can be fairly effective in overcoming the abovementioned challenges of too little funding being efficiently and effectively directed to the local level as finance is lost on the way or available money is not addressed at the local level (see 2.2.1). The logic of direct access channels works

- best for recipients that have sufficient capacity to manage the disbursed funds themselves and who are able to effectively communicate their needs and/ or apply for available funding windows.
- **Challenges of the approach:** Despite these positive aspects of providing fairly efficient ways of channelling money to the local level and direct access opportunities, this elevator alone does not provide a solution for the difficulties in identifying the right projects and communities that should be reached by the funds. It addresses neither the described challenges of international funding priorities not being relevant or realistic for local entities nor the lack of involvement of local actors in decision making and funding allocation (see 2.2.2). The process faces particular hurdles if local structures and capacities are not sufficiently developed to communicate needs, play a role in allocation decisions, make use of/apply for available funding opportunities, and manage funding themselves (see 2.2.3). As mentioned above, effective MRV would be another challenge here due to the trade-off between efficient distribution and impact measurement.
- Application to adaptation finance at scale: In order to apply the logic effectively and at a larger scale to adaptation finance it is therefore crucial to not see this elevator function as a standalone tool but to combine it with other mechanisms that can overcome allocation and distribution challenges. At the same time, when applying this function, it is important to comprehensively screen the intended target group a priori. The methodology of direct access and investments might not be the right mechanism for a context with very weak local players as the main target group. However, depending on the extent of lacking capacity, adding on capacity building or aggregation measures for communities and local projects might be one option to partly tackle this.
- Examples of analysed funds and instruments: Several of the financing instruments analysed for this paper from within and outside the climate finance world use aspects of this elevator logic in their approaches (see Annex I). One of the most prominent examples are direct payments through the EU Common Agricultural Policy that provide local actors with direct funding in order to effectively channel money to local farmers in need and directly support rural areas in addressing economic, environmental and social challenges. Another important example are challenge funds that are widely used across many sectors, particularly in international

development. Through calls for proposals, these funds are equipped with financing from donors and directly select applying projects or local entities with promising ideas for tackling specific problems and disburse money to them. To a certain extent, this logic is also used in the Dedicated Grants Mechanism (DGM) of the Climate Investment Funds (CIF) in which DGM country projects provide grants directly to grassroots organisations of local communities in target areas. Dedicated credit lines are another example of a financing instrument that applies the logic of this elevator as end borrowers of credit lines are often small and medium sized enterprises whose business activities can play an important role in climate change adaptation at the local level.

3.1.2 Locally Administered Funds

- Functioning of the elevator: Another elevator function that we identified as a relevant approach for channelling finance to the local level in the analysis of different instruments are locally administered funds that can be found in some existing financing schemes. The logic behind this approach is that international financiers decentralise funding decisions and work with intermediaries that (partly) manage disbursement and allocation decisions of available funds at the local level. The intermediaries and the financiers agree on a set of criteria according to which the provided funding can be disbursed to respective target recipients, communities, and projects. If intermediaries are chosen on a rather low vertical level (e.g. district or local level) more effective channelling of funding to local projects and entities with identified needs can be facilitated. This logic is particularly useful if there are well defined target regions for the funding in which the international financier has limited knowledge about the local context but has access to trustworthy entities that can act as intermediaries. Getting to that point might often require additional capacity building.
- Benefits of the elevator and challenges tackled: The decentralisation elements of locally administered funds ensure better knowledge about local context factors and facilitate participation and general involvement of local players. This mechanism thus partly addresses the challenges of available funds not being sufficiently adapted to local needs, the difficulties for local entities to access international funds, the lacking alignment of funding priorities with local realities, and the lack of involvement of local actors in funding allocation (see 2.2.2.). Even

though the approach is less direct and involves more layers and complexity than direct investment and access channels (see 3.1.1) it mostly still reduces the layers and players involved compared to the complex process described in Chapter 2.1.

- Challenges of the approach: Despite the illustrated advantages of locally administered funds, there are inherent challenges of this approach. The selection of trustworthy intermediaries requires a very thorough screening of potential entities to ensure allocation decisions are taken appropriately. Furthermore, selecting the right target regions and respective intermediaries already requires a solid knowledge of local contexts. Setting clear allocation criteria and solid fund structures with the selected intermediaries as well as managing them throughout are further complexities of this approach. Lastly, the availability of entities that have the required capabilities for administering funds as intermediaries is another key challenge.
- Application to adaptation finance at scale: To apply this approach at scale to adaptation finance it is important to combine the setting up of locally administered funds with capacity building initiatives for the intermediary entities and develop clear management structures. The scale-up potential of the approach across regions is somewhat limited due to the management effort for the international financier in overseeing all different locally administered funds. Its application is therefore recommended for specific regional target areas with strong local partner organisations that clearly understand the differences between economic development and adaptation.
- Examples of analysed funds and instruments: Several examples of financing instruments that partly use the logic of locally administered funds were identified in the analysis for this paper (Annex I). An obvious case are decentralised climate adaptation funds through which governments in pilot countries such as Mali and Kenya have established elevators that enable them to channel climate finance to 'Climate Adaptation Funds' (CAFs) at local government level, where the money can then be planned and budgeted in partnership with communities. Similarly, within the concept of Frontier Funds, community-led funds are developed through a bottom-up approach and low-income communities can influence how fund priorities are set and money is spent. Another example that uses this logic to some extent is the European Maritime Fisheries Fund (EMFF) as

part of the European Commission's community-led local development (CLLD) that describes a contrary approach to the traditional "top down" development policy. Projects receive long-term funding from the EMFF and decide independently where the money is invested.

3.1.3 Participatory Funding Structures

- Functioning of the elevator: A third category of elevator functions that support better channelling of funds to the local level are forms of participatory funding structures. The focus of this approach is not on changing the process of finance flows in a narrow sense but on involving more local players and communities in key decisions of the respective financing instrument. This includes representation of local entities and communities in decisions around structures, funding mechanisms, disbursement criteria, fund allocation as well as specific project design and implementation elements. This is not limited to the pre-disbursement stages and can include all stages of funding including monitoring and evaluation. The aim of this approach is to maximise context-specificity of financing streams and consideration of local needs and requirements in key processes and decisions. The form of how participation can be ensured differs in its level of formalisation and ranges from beneficiary and stakeholder consultations, to formalised obligatory fora for representing local entities in decision processes, and quotas for local representation in fund committees.
- Benefits of the elevator and challenges tackled:

 Participatory funding aims to primarily overcome challenges related to insufficient adaptation of funds to local needs and realities, such as misaligned funding priorities of funds, lack of involvement of local actors in decision making and funding allocation as well as avoidance of high barriers for local entities to access international funds (see 2.2.2). Compared to locally administered funds (3.1.2), participatory funding structures can be more inclusive by involving more actors than just the selected intermediaries and integrating smaller and more local players from the community level.
- Challenges of the approach: Despite strengthening local involvement, the differing levels of formalisation do not guarantee fair representation of local players. Participatory funding structures run a risk of under-representing local entities and communities with lower capacities and those at the lowest regional level. For this reason, participatory funding

structures need to be carefully designed to avoid backlashes and unfair allocation of funds. Furthermore, through the involvement of a large number of players in decisions, processes, and disbursement can get very complex, lengthy, and less efficient. Opting for decision rules leaning towards majority voting rather than unanimity seems thus advisable to avoid inefficiencies and blocked processes. Getting the balance right between including local players, taking well-informed allocation decisions, and avoiding inefficient funding processes is a key challenge of designing participatory funding structures.

- · Application to adaptation finance at scale: For incorporating stronger participatory funding structures in adaption finance it is important to couple such an effort with capacity building measures for local communities, entities, and projects to better enable them to take part in the available forms of representation. Avoiding misrepresentation of stronger communities needs to be a key priority. Therefore, comprehensive stakeholder mapping for any target region needs to necessarily happen before funding structures of this kind are implemented. Comprehensive local participation is difficult to implement at large scale as conditions across regions can vary significantly and respective processes can be very time-consuming. It therefore seems more effective to develop overarching standards for including local players with a significant level of flexibility for different specific regions or programmes.
- Examples of analysed funds and instruments: Many of the analysed financing tools allow local participation to some degree. The strongest cases are obviously those where funds are fully managed by communities or local players (see 3.1.2). Beyond these, more conventional financing mechanisms also make use of participatory funding mechanisms. One example is the GEF Small Grants Programme in which local communities are able to engage directly in the design, appraisal and evaluation of climate and development projects. As a further example, some challenge funds allow significant local participation in decisions on funding allocation if they include local players in investment or funding committees. Another strong example are the World Bank's Community-Driven Development (CDD) Programmes that work in close partnership with local governments and other institutions to ensure broader community support through the identification of local priorities and giving community groups more control over resources.

3.1.4 Competitive Elements in Fund Allocation

- Functioning of the elevator: Another option of structuring funding processes to channel money efficiently along clear and fair criteria are funding instruments that allocate funds according to competitive elements. In these models, specific funding criteria, such as local embeddedness of a project or needs assessments are defined at the outset. Local entities and projects can then apply for funding, make the case for their intended activities, and compete for funding in open calls or separate funding windows specific to local requirements and context factors. The primary driver behind such competitive elements is to identify the most applicable projects in a fair and objective process that is open to communities and local projects. Such models can include eligibility criteria for applying entities and projects in order to restrict funding and ensure that institutions and projects without a local focus are excluded. If criteria are well designed, it can be ensured that funding is specifically targeted at local entities or at projects that provide clear needs assessments or proof of community involvement in project design. Competitions can work via rolling application processes or specific time-bound investment windows and funding decisions are often taken by a committee of different stakeholders.
- Benefits of the elevator and challenges tackled: The benefit of competitive elements in fund allocation is that those communities who can make the strongest case for their financing needs will receive funding and that decisions are taken in a fair process according to specific pre-defined criteria. Furthermore, competitive elements challenge local projects and communities to seriously consider their needs and suggested responses. Furthermore, the process can be relatively efficient for the financiers as the competitive application process allows financiers or regional fund outlets to simply choose the best applications rather than actively seek potential projects. Clear criteria with a strong local focus can thus enable efficient allocation processes to local communities and projects with identified needs. Hence, competitive elements help to overcome challenges related to finance being lost on the way and money not being addressed at the local local level (see 2.2.1). Moreover, the approach addresses the difficulties for local entities to access international funds, lacking involvement of local actors in funding allocation, and funds being insufficiently adapted to local needs (see 2.2.2).

- Challenges of the approach: However, competitive elements run an inherent risk of constantly picking winners if some weaker communities and local entities lack the capacity to submit compelling applications. Therefore, there is a chance that those projects and communities that need the greatest support are disadvantaged by the competitive nature of the selection process. Secondly, even though skipping several vertical layers and using a competitive process provides an efficient way of distributing funds in theory, running sufficiently decentralised competitions and administering these processes or fund outlets creates a significant administrative burden for the financier. Especially for a roll-out at a larger scale this creates a significant challenge.
- Application to adaptation finance at scale: For making greater use of competitive elements in adaptation finance, it is essential to complement these initiatives either with capacity building or pro-active proposal writing support for local communities. In addition to this, selection criteria should be designed in a way that identified adaptation needs in the application play a greater role than how compelling the application is written. If these considerations are taken into account then competitive elements could be a valid elevator function for selected regions with a high density of communities with different (but not existential) adaptation needs.
- Examples of analysed funds and instruments:

 Competitive elements are to some extent used in several financing instruments that include calls for applications or proposals in general. However, the strongest, most explicit example, and most relevant case from our analysis that is primarily built on this logic are challenge funds. As explained in more detail in Annex I Financing Instruments for Channelling Funding, challenge funds call for direct applications particularly by profit-seeking projects and local entities. The decision on resource allocation is taken on a purely competitive basis through neutral investment committees along certain criteria focused on a specific cause, challenge or investment window.

3.1.5 Performance-based Funding Streams

• Functioning of the elevator: Another elevator, with a very similar logic to the competitive elements in fund allocation presented above (see 3.1.4), are performance-based funding systems. The key difference is that these funding streams work with performance criteria throughout a longer time horizon

- during the disbursement period rather than mostly focusing on competitive elements at the time of taking the initial allocation decision. As such, an initial allocation decision can be understood as smaller pilot to figure out whether the right communities or projects have been supported in the disbursement phase. The complex decisions where money should be channelled to are only to a limited extent taken in a priori analyses and are mostly refined once first effects can be seen. Performance criteria can be conditions for continuous ramp-up of funding or for the disbursement of additional tranches. It is important to understand performance in a broader sense. Performance criteria can include elements that aim at maximising impact at the local level such as continuous needs assessments, proof of community involvement in implementation, or proof of how much funding or project activities reach entities at the local level. They can thus either be used to put pressure on entities on intermediary levels that further allocate funds or to reassess the allocation decisions directly on the local level.
- Benefits of the elevator and challenges tackled:

 Through the performance criteria and increased pressure, this approach can play a role in overcoming problems related to funding not being properly directed to the local level by players on intermediary levels (see 2.2.1). More importantly, the adaptive approach of allocation in tranches based on clear criteria can help to overcome problems related to funds and funding priorities that are insufficiently adapted to local needs and realities. Furthermore, it can facilitate access to funds for local entities as initial access/entry barriers can be lowered due to the phasing of allocation and disbursement processes.
- Challenges of the approach: Despite its benefits, performance-based funding should not be seen as a standalone elevator but rather as an add-on element to other measures for making the channelling of funds to the local level more effective. It lacks a mechanism for letting money flow faster and more efficiently through the different layers and does not solve challenges related to initial allocation decisions per se, apart from allowing pay-outs to a broader base of communities and local projects. Furthermore, effectively assessing the performance criteria can be very burdensome, which makes it difficult to integrate such a system at a larger scale.
- Application to adaptation finance at scale: To make use of this mechanism in adaptation finance, it is needed to define suitable performance criteria that

fully take into account the requirements of effective climate adaptation at a local level. Similarly to competitive elements, these criteria need to be designed in a way that avoids picking winners and rather take real adaptation need, impact potential, and local involvement into account. If effective criteria can be found, then, a performance based funding system could be integrated in existing systems in smaller pilots to test processes and set criteria. The phased payment schedule should ideally not involve too many stages to avoid overburdening the fund managers.

• Examples of analysed funds and instruments: Not many of the analysed financing instruments use

performance-based funding streams explicitly as a primary principle. The most suitable example is the Local Climate Adaptive Living Facility (LoCAL) that combines performance-based climate resilience grants, which ensure programming and verification of climate change expenditures at the local level with technical and capacity-building support. It uses a demonstration effect to trigger further flows for local adaptation. Beyond this, the United Kingdom's (UK) Department for International Development (DFID) uses the logic of performance based payments in tranches to local beneficiaries in many of their market systems development/M4P projects (outside the scope of this analysis).

3.2 Needed Enabling Activities beyond Financial Elevator Functions

The analysis has shown that not only the financing supply side, i.e. elevator functions in financing instruments and funds needs to be addressed but also the demand side needs to be taken into account to ensure that financing needs are more effectively identified and communicated by local actors. Therefore, this section elaborates on the enabling activities beyond pure financing instruments which provide an essential prerequisite to develop more efficient steering procedures towards the local level. There are two main approaches of how local actors can be strengthened: Either through capacity building for local level representatives and organisations or through grouping and aggregating local level entities as well as developing networks to strengthen their capacity and position through cooperation and collective advocacy.

3.2.1 Capacity Building and Technical Assistance for Local Actors

One option of how relevant players on the local level can be strengthened in order to enable them to make use of available adaptation financing options is building their individual capacities through technical assistance components. Firstly, by training local level representatives and organisations, their capacity to identify and communicate specific local funding needs can be enhanced. Without properly communicating adaptation needs in different communities from a bottom-up perspective, it is very difficult for international donors or intermediary organisations to adequately allocate adaptation financing in a targeted approach.

Secondly, capacity building and technical assistance

should aim at strengthening the ability of local entities to access available funding, apply for funding windows, and manage received funds effectively. Many of the currently available and new suggested funding instruments for adaptation finance still require local entities to develop proposals or respond to calls for applications in order to make a convincing case why they should receive funds. Thus, capacity building is an essential prerequisite in order to improve budget allocation structures and, subsequently, ensure the efficient implementation of steering methods.

Both abovementioned key capacities are still widely lacking among local entities in many countries. Without putting effort into overcoming these challenges the majority of suggested elevator functions can only work to a limited extent. The sequence in which the respective prerequisites are addressed is certainly very context-specific; however, structural developments and professional training are two closely intertwined components that should always be taken into account at the same time. Therefore, for many of elevators, we suggest complementing them with some sort of capacity building approach and technical assistance elements.

3.2.2 Grouping and Aggregating Local Actors to Increase Shared Capacity

A complement to comprehensive capacity building for individual entities and organisations could be a focus on strengthening smaller local players through grouping them and establishing networks between them. This would be easier to handle and would require less

active involvement of the donors and funds than for dedicated training components. Apart from the reduced effort and resources needed, this approach is more bottom-up than the abovementioned top-down capacity building measures and, thus, allows stronger local ownership. By aggregating local level representatives and smaller organisations, their joint capacity to identify needs, apply for funding, and manage funds can be strengthened. Grouping different players and developing networks can also enhance their advocacy positions to communicate needs effectively.

In this approach, the role of the international donor or intermediary would primarily be to encourage local entities to establish groups and adjusting payment modalities to grouped recipient entities accordingly. Beyond encouragement, information, and soft facilitation of aggregation, the local players themselves would have the primary implementation responsibility. As such, this could be a fairly simple add-on element to some of the elevator functions described above.



This paper reemphasises that climate change adaptation is a global concern and requires significant investment from various sources, including international donors and development banks. Both rural and urban communities in developing countries are particularly vulnerable to the adverse effects of climate change. Yet, many existing financing instruments are not sufficiently accessible for projects on community level or struggle to steer funding to the local level effectively and efficiently. Meanwhile, locally designed and implemented adaptation projects often increase the chances of success and yield greater benefits in effectiveness and sustainability if they receive the necessary funding.

We identify different barriers that hinder the flow of adaptation finance from the international to the local level. Some challenges make it difficult for local actors to access available finance, while others prevent international entities from getting access to the local level. For example, too little funding reaches local authorities as it is often lost in complex finance architectures at international and national level. Besides, available funds are not always adapted to community needs and priorities of local entities. Moreover, insufficiently developed local structures and a lack of capacity are further hurdles for properly accessing and absorbing funding at the local level.

Through the comprehensive analysis of favourable funding characteristics within climate finance, international development funds, and other alternative financing instruments from a wide range of sectors, this paper looks at various approaches for the promotion of local adaptation finance through different elevator functions. Across the large number of analysed funds and instruments, **five categories of elevator functions** have been identified as particularly promising. Their added value for improving financial flows and tackling the abovementioned challenges can be summarised as follows:

- Direct investments and direct access channels provide funding as directly as possible to the local level by overcoming as many barriers and layers as possible between the source of funding and the target communities.
- Locally administered funds foster allocation decisions of available funds at the local level through decentralisation elements, cooperation with intermediaries and the involvement of local knowledge on context factors.
- Participatory funding structures, as a third category, support better channelling of funds to the local level by involving more local players and communities in key decisions of the respective financing instrument.

- Funding instruments that allocate funds according to competitive elements, using specific funding criteria such as local embeddedness of a project or needs assessments can identify the most applicable projects in a fair and objective process that is open to communities and local projects.
- Performance-based funding that works with performance criteria throughout a longer time horizon allows for smaller pilot programmes in order to determine the right communities or projects to support throughout the disbursement process in different phases and tranches.

Some overarching findings from the analysis include that local capacities are crucial for the instruments to work and, hence, there is the risk of picking winners (those with strong capacities). Therefore, as enabling elements to these categories of elevator functions, we highly recommend the integration of capacity building efforts for local institutions and supporting the establishment of networks between local entities. This is invaluable to ensure that players at the local level are able to make better use of available funds.

The general objective of this analysis is to provide adaptation finance practitioners, project managers and experts from donor agencies, development finance institutions, multilateral funds and programmes with recommendations on how to strengthen their adaptation financing approaches. However, as this is intended to be a scoping paper, its coverage is limited to providing a rather light overview of potentially suitable elevator functions that could drive a more effective channelling of adaptation finance to the local level rather than fully fledged roll-out strategies. In order to think about how such amendments to the adaptation finance architecture could work in practice further research is required. In general, we stress that the different options presented in Chapter 3.1 should not be seen as standalone measures and recommend considering ways of bundling several of them into new context-specific funding tools or integrating them in existing mechanisms. For an effective implementation, all options should consider a module aiming at strengthening local entities in their capacity to communicate needs and access funds (see 3.2).

Further research could be outlined in a **research** agenda and should focus on the following aspects:

 More emphasis should be put on developing tangible strategies for how these elevators can be used in practice. Once a selection of the most interesting approaches has been identified, it is important to

- develop detailed roll-out plans for each of the approaches. The most feasible approach might be to define a small number of specific regional case studies in which a roll-out in practice can be piloted and on which an initial roll-out plan can be focused. This could then be translated into more general guidelines for each elevator function in a second step.
- Building on the first step mentioned above, more
 thinking should go into identifying the right elevator for specific circumstances and target groups.

 Based on specific regions of interest, a selection of
 the most relevant approaches for these contexts
 can be made. One approach could be to develop a
 decision tree or decision matrix that matches the
 available approaches with certain potential context
 factors of different regions. This decision tool could
 then help to find the ideal elevator approach for a
 specific context.
- As the roll-out of new approaches might take more time and effort, research should also focus on exploring ways of how the learnings from this paper could be integrated in existing adaptation finance tools. This could facilitate quick wins through low hanging fruits and act as an indirect way of piloting elements of the approaches. A matching exercise of existing adaptation finance instruments and suitable elevator functions that could be integrated in each of the instruments could be the first step for this.
- Apart from integrating smaller elements in existing
 financing instruments, research should also go further and look at how the different options identified in this paper could be bundled in an ideal case
 scenario. This bigger picture approach would allow
 modelling a greater vision for the potentially most
 effective and powerful instruments that could be developed over the next years for adaptation finance.
- An important general next step for research that should be included for all of the options that are considered for implementation on the ground are comprehensive stakeholder consultations with local entities in the respective target regions. All potentially suitable approaches should be discussed with target groups in developing countries in detail to further refine the ideas and identify potential weaknesses. Without this step sufficient context-specificity cannot be ensured.
- In a further step, a guideline for practitioners could be developed, based on the paper at hand.
 This guideline could be structured as a significantly shorter step-by-step guide that refers back to this

scoping paper and its analysis wherever necessary. The target group could be practitioners involved in planning adaptation measures on the ground on the one hand and those providing finance for the same on the other hand. It should support them in conducting feasibility assessments of specific, planned activities and investments that allows aligning activities on the ground with available and accessible financing options and vice versa.

Recommendations for Action

Based on the assessment of the elevator functions and enabling activities, the following recommendations for actions are offered to adaptation finance practitioners, project managers and experts from donor agencies, development finance institutions, multilateral funds, and programmes in order to best address the mostly localised vulnerabilities for their adaptation financing:

When developing funding strategies

- Integrate new elevator functions in existing financing instruments and programmes. The application of elevator functions does not entail the need to develop completely new financing instruments. Adaptation finance practitioners and donors should not hesitate to incorporate innovative operating principles for channelling funds to the local level in their already existing funding programmes and initiatives. Holistic impact evaluations as well as improved transparency, integration, flexibility, monitoring, and continual knowledge sharing should accompany these processes to ensure the long-term sustainability and effectiveness of the newly applied principles and elevators.
- Enhance transformational adaptation finance through the integration of innovative funding principles from other sectors. Thinking outside the box and developing fundamentally new and innovative approaches to adaptation financing informed by instruments and elevator functions from other sectors allows addressing the root causes of local vulnerability in a broader and more systemic way. This rationale holds for the practical intervention on the ground itself as well as for the respective funding structures. This recommendation is thus addressed at both practitioners and managers of concrete programmes as well as more strategic decision-makers at a higher level.
- Apply specific thematic or community-prioritised investment windows and fund allocation criteria.
 Through the preference matching based on local

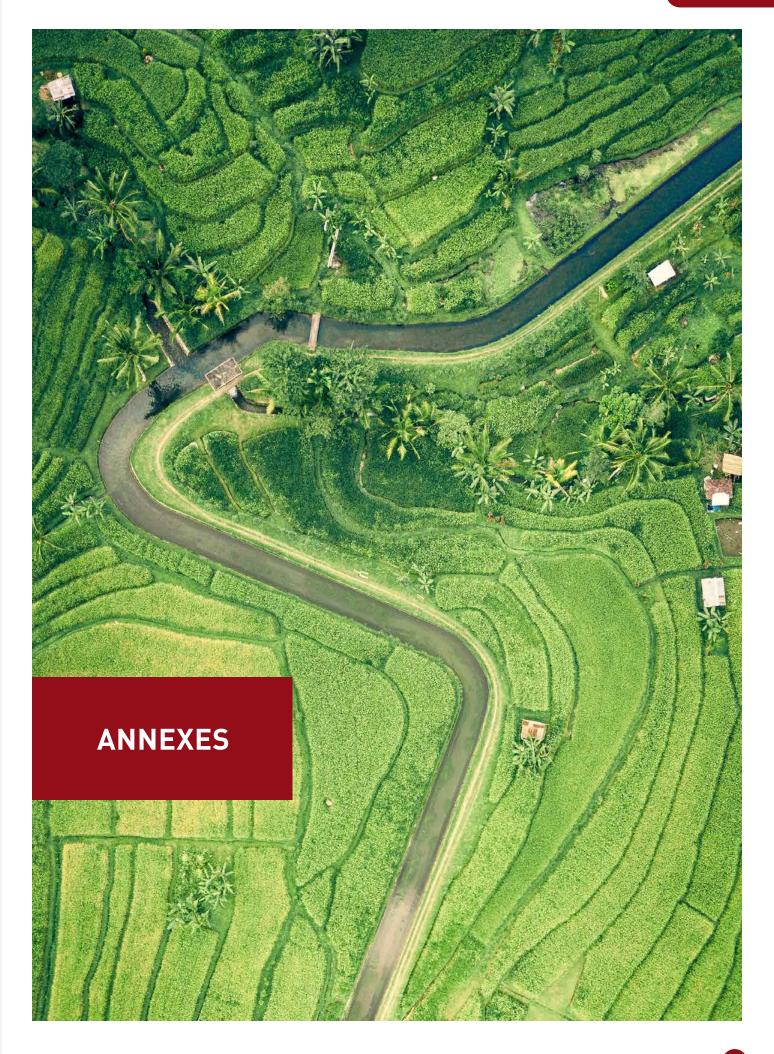
needs, funds can be directed straight to where need and potential impact are highest and, thus, improve the efficiency of service delivery for adaptation. Criteria should be clearly indicated to eliminate misunderstandings and facilitate the work of local communities and project stakeholders on the ground throughout the application process. Such considerations should be taken into account when setting up and designing a new programme or financing instrument as well as during actual implementation and refinement by those managing the specific funds and programmes on the ground.

 Consider introducing direct access modalities for entities at community- or district-level. Complementing existing financing programmes and schemes with some form of direct access modality provides the opportunity to directly reach the target communities. Overall, the streamlining of financing procedures allows faster and more direct channelling from the international to the local level.

When deciding on the allocation of financial assets

- Promote local ownership by transferring budget control to local entities. Locally administered funds and participatory funding structures strengthen the role of local players in decisions on fund distribution and can ensure stronger local ownership as well as more effective, better informed and needs-based allocation of adaptation finance to communities and local projects. Beyond the argument of financial effectiveness, local entities with stronger ownership of funds and responsibility for allocation decisions are likely to have higher commitment to the programmes which prevents potential hostile reactions from the communities.
- **Encourage local participation.** Even if funds are not administered by local entities, encouraging their participation and involving them in strategic or allocation decisions as well as in the refinement and implementation of programmes on the ground can strengthen the channelling of adaptation financing. Local experts and stakeholders often have expert knowledge on the local context of climate change risks, vulnerabilities, and impacts that programme managers and adaptation practitioners can tap into for better project implementation and funders should use when justifying funding allocations. In order to adapt funding procedures to local realities and, hence, achieve more sustainable results of the respective adaptation measures, local level actors must be included and consulted in these

- decision-making procedures. This implies participatory budgeting, e.g. through workshops that engage civil society and citizens' groups, and other procedures through which local actors have the opportunity to influence the allocation of public resources while taking sectoral priorities into account.
- · Encourage inclusive and innovative projects through competitive and performance-based funding criteria. Inclusive and innovative approaches that build on local contextual conditions in terms of design, funding proposal, and subsequent implementation while showing a high level of local creativity and innovation, should be favoured in the course of the allocation process. Competitive elements in fund allocation and performance-based funding streams allow a stronger focus on needs and expected outcomes and ensure that communities and projects with potentially high impacts or greater needs are effectively reached via accessible funds. Through aligning impact priorities with competitive selection criteria and specific investment windows, strong, localised, and targeted project proposals on the local level can be supported effectively.



ANNEX I

FINANCING INSTRUMENTS FOR CHANNELLING FUNDING

The following chapter sheds light on a variety of existing financing instruments that include an elevator function which responds to one or more of the identified challenges in steering finance to the local level. In the first part of this chapter, existing financing instruments from the adaptation sector are presented in a short overview of their respective structures. Subsequently, the relevant elevator functions through which funding gets forwarded to the local level within these instruments as well as possible room for improvement and challenges are identified and illustrated by different examples. In the second part, instruments from sectors other than climate adaptation are introduced accordingly and their potential transferability to adaptation finance is discussed. For each instrument, we describe the general approach and aim, the embedded

elevator functions, existing room for improvement in the approach, examples of their usage, and in the case of instruments not specifically targeted at adaptation, on how they could be used for adaptation finance. To be open to as many forms and shapes of elevator functions as possible, the range of instruments covered in this analysis is very broad and reaches from concrete programmes and specific regional initiatives to broader categories of financial instruments. In TABLE 3 and TABLE 4, we therefore add a categorisation along this range: firstly, concrete programmes (C), secondly, broad types of instruments (B), and thirdly, hybrids between the two (H) for cases where a concrete programme has evolved into a broader type of instruments through iteration and replication.



INSTRUMENTS FROM THE FIELD OF ADAPTATION

At the international level, there are a number of instruments in place which distribute resources, provide technical assistance, and support countries' efforts to integrate climate risks and resilience into development planning and budget allocation towards the local level. By means of participatory funding structures whereby local communities are able to engage directly in the

design, appraisal and evaluation of climate and development projects and through direct access modalities for programmes on community level, resources should be steered to where they are needed most. The table below lists all instruments analysed and shows which of the abovementioned overarching challenges (see 2.2) they address. TABLE 3

1. Direct Access Modality of Adaptation Fund and Green Climate Fund

Introduction

Within the international adaptation finance architecture, the AF and GCF are pioneering through their direct access modality which allows their use through country institutions and systems. The mechanism is designed to help developing countries exercise ownership of climate change funding and better integrate it with their national climate action plans.

The GCF enables developing countries to access financial resources through national entities, aiming at channelling finance directly to the country. National Designated Authorities (NDAs) of beneficiary countries nominate regional, national or sub-national institutions for accreditation to the GCF. Once the direct access entity (either public or private sector, or non-governmental) receives GCF Board approval, it is authorised to submit funding proposals for GCF-backed projects and programmes. The GCF's Project Preparation Facility supports direct access entities to develop innovative project ideas from concepts into

TABLE 3

Instruments from the field of adaptation

	CHALLENGE		Too little funding efficiently and effectively directed to the local level	Available funds not adapted to local needs / realities	Local structures and capacities not sufficiently developed
1.	Direct Access Modality of AF and GCF	C*	×	×	
2.	People's Survival Fund (Philippines)	C*	×	×	
3.	"On budget, off treasury financing" in Nepal	C*	×	(x)	(×)
4.	Pilot Program for Climate Resilience (PPCR) and Forest Investment Program (FIP)	H*	×	×	×
5.	GEF Small Grants Programme	H*	×	×	×
6.	The Local Climate Adaptive Living Facility (LoCAL)	H*	×		×
7.	Decentralised Climate Adaptation Funds	H*	×	(x)	
8.	Dedicated Credit Lines	В*	×	(×)	
9.	Microfinance	В*	×	×	(×)
10.	Direct Climate Risk Insurance	В*	×		

^{*}C = concrete programme; H = hybrid between concrete programme and broad type of instrument; B = broad type of instrument

Source: Authors' own depiction

high-quality funding proposals (Green Climate Fund 2018a) and the GCF Readiness and Preparatory Support Programme provides resources to engage stakeholders, strengthen the capacities of direct access entity candidates, and support the coordinating mechanism for GCF engagement.

In the case of the AF, National Implementing Entities accredited by the AF Board, are able to receive direct financial transfers from the Fund while managing all aspects of climate adaptation and resilience projects independently: from design through implementation to monitoring and evaluation (Adaptation Fund 2017a). For example, GIZ's Climate Finance Readiness Programme has supported a call from the Tanzanian Ministry of Water (which is accredited to the AF) for funding proposals. In the end, 73 funding proposals were submitted and 3 selected which will now be handed to the AF.

Elevator Function

The AF has allocated a minimum of 50% of its resources to direct access entities (IIED 2017), creating a pathway for developing countries to take ownership of their own response to climate change, building their own capacity from within, and aligning closely with national priorities.

In order to promote country ownership of climate finance, the GCF has adopted a further reaching modality: the Enhanced Direct Access (EDA) which provides the opportunity for nominated national entities to undertake a programmatic approach to climate finance with greater decision making at the national level, whilst also enhancing international financial support to scale up local action on climate change. The EDA programmes set a special focus on local intermediaries in order to reach communities and small and medium-sized enterprises (SMEs) who get involved in projects addressing local challenges (IIED 2017).

Room for Improvement and Challenges

Direct access modalities still lack the necessary access paths to ensure financial benefits on a local level. 42% out of the 84 GCF accredited entities are national direct access entities (Green Climate Fund 2018b). The AF counts 6 regional (Adaptation Fund 2018b) and 28 national implementing entities (Adaptation Fund 2018a). So far, neither of the two funds works through sub-national entities to channel its resources to projects and programmes.

Example

South African National Biodiversity Institute (SANBI)

The South African National Biodiversity Institute (SANBI) is a national implementing entity working under the Department of Environmental Affairs (DEA). It contributes to South Africa's sustainable development by facilitating access to biodiversity data, generating information and knowledge, building capacity, providing policy advice, and conserving biodiversity in its national botanical zoological gardens (South African National Biodiversity Institute 2018).

Once accredited by the AF, the institute was able to foster the representation of different stakeholders by creating a national steering committee including, amongst others, government departments as well as civil society. By identifying local needs through the dialogue with affected communities, SANBI ensured the local relevance of projects, increased local resilience,

and gained broad public support across the country (Adaptation Fund 2017a).

In the framework of the AF funding, for instance, SANBI runs a programme called the "small grants facility (SGF)" a four-year community-based adaptation pilot project. A Cape Town based think tank – South-SouthNorth – is implementing the SGF, which functions as an enhanced direct access modality allowing civil society organisations to access climate finance for locally relevant adaptation projects at the community-level in at least one of the three investment windows: Climate-Smart Agriculture, Climate-Resilient Livelihoods and Climate-Proof Settlements (South-SouthNorth 2018).

The SGF is well received in South Africa and is the prime example of international adaptation finance going through to the local level.

2. People's Survival Fund, Philippines

Introduction

Developed by the Philippine Climate Change Commission (CCC) in 2012, the People's Survival Fund (PSF) is a special Fund in the National Treasury for the financing of climate change adaptation programmes and projects aligned with the country's National Framework Strategy on Climate Change (NFSCC) and the National Climate Change Action Plan (NCCAP). The NCCAP highlights the importance of Local Government Units (LGUs) in serving as frontline agencies in the formulation, planning, and implementation of climate change action plans (People's Survival Fund 2017b).

The Fund is used to support adaptation activities in the areas of water resources management, land management, agriculture and fisheries, health infrastructure development as well as natural and coastal ecosystems. Furthermore, it covers improving the monitoring of vector-borne diseases triggered by climate change, forecasting and early warning systems, and supporting institutional development (People's Survival Fund 2017b).

Elevator Function

The fund focuses on initiatives intended to improve the resilience of the target locality/community, along with their natural and man-made resources, to over-

come natural hazards of climate change and variability. Special attention is given to the sustainability of the programmes to ensure that they keep up with the evolving conditions brought by climate change. In order to comply with these demands, PSF follows an "enhanced direct access" modality of disbursement for localities (Institute for Climate and Sustainable Cities 2017): The PSF is directly addressed at LGUs (provinces, cities, municipalities) and accredited local/community organisations, provided that they comply with the respective accreditation guidelines. Priority is given to those with high presence of multiple, climate-related hazards, high poverty incidence, and with present key biodiversity areas (People's Survival Fund 2017a). By directly cooperating with institutions at a local level which themselves assume the responsibility for project formulation, planning, and implementation, the fund ensures that small rural communities are able to meet local priorities (People's Survival Fund 2017b).

Moreover, LGUs and accredited local/community organisations need to present data on climate-related hazards and their effects, climate scenarios and projections, and people and areas exposed to various climate hazards in the course of the application process (Banaguas March 09, 2017). The scientific assessment of local climate vulnerabilities from the very beginning of

the project formulation phase increases the likelihood that the following implementation will effectively address the respective communities' needs.

Room for Improvement and Challenges

Developing non-business-as-usual planning and budgeting entails certain difficulties for the applying LGUs and community organisations: Planning adaptation activities requires a clear understanding of local climate vulnerabilities and the capacity to translate those into baselines which will then serve as the starting point of the PSF proposal. However, the respective units often lack the knowledge and resources in

order to develop and submit proposals that meet the processing requirements of the PSF and other similar climate financing facilities (Supnet 2017). This has led to criticism that the PSF is too difficult to access and decreased public interest in the application process.

Furthermore, the Secretariat continues to face challenges in operationalising the fund and in ensuring that its requirements do not disadvantage the poorer LGUs that depend on financing and technical support. There is strong need for technical assistance to strengthen the PSF Secretariat's capacity in executing the mandate of the Fund (Global Green Growth Institute 2018).

Example

Del Carmen, Siargao Island (since 2016)

The proposal of the Del Carmen in Siargao Island, the "Siargao Climate Field School for Farmers and Fisherfolk", was one of the first full proposals submitted to and approved by the PSF board in 2016. Del Carmen is a fifth-class municipality and one of the LGUs of the CCC's Ecotown Program. The town developed its own climate change adaptation plan which covered agro-fishery and mangrove protection, disaster risk reduction, social tourism, and health. To learn about climate change adaptation, the LGU had previously collaborated with national government agencies and learned from the experiences of non-government organisations and universities around the country (Coro 2018).

The project, although still in its early stages, is designed to

- equip the community and local government with the right tools and equipment for planning and early detection of climate-related hazards and extreme climate event;
- monitor risk and restoration of degraded areas and outbreak of pests and diseases;
- provide livelihood and capacity to local communities; and establish research information centres and networks to support climate change adaptation initiatives and projects

3. "On Budget, Off Treasury Financing" in Nepal

Introduction

In this model, international climate finance is reflected in the national budget and, as such, can be counted towards climate adaptation finance. Instead of managing it by the national treasury, the available assets can be disbursed directly to local actors though.

In August 2018, the Government of Nepal, UNDP and DFID in Nepal have signed an agreement to support climate-vulnerable municipalities to design and implement climate-resilient development initiatives (UNDP 2018a).

As part of the agreement, the UK will support UNDP to implement the Nepal Climate Change Support Programme (NCCSP) in 14 selected municipalities of the

provinces. The GBP 2 million project will be implemented over the next year (2018–2019), under the leadership of the municipalities. The project will embed climate resilience into development plans and implement close to 100 locally-identified climate adaptation projects related to drinking water, irrigation, slope stabilisation and water conservation (UNDP 2018a).

The project has been envisioned as a transitional extension adapted to the new federal set-up of the country, based on learnings from the implementation of NCCSP Phase I from 2013 to 2017 which already linked bottom-up (local) and top down (national) processes (UNDP 2018b).

Elevator Function⁸

The key aim of the on budget, off treasury logic is that funds can be disbursed more effectively and more efficiently to the local level and the players responsible for implementation. The disbursement process gets streamlined by cutting out players between the source of funding and the beneficiaries, such as the central banks or other treasury institutions.

In the context of federal Nepal, elected local officials are expected to take a leading role in improving the resilience of their communities. As such, NCCSP is one of the first development programmes to completely reshape its delivery model in response to federalism: It puts municipalities in the driving seat, helping them to identify and deliver investments that build resilience against climate change (UNDP 2018a).

One of the key objectives is to enhance the skills of Nepali government entities and non-governmental (NGOs, CBOs, private sector and communities) institutions to finance and execute the most urgent and immediate adaptation actions (UNDP 2018b). Hence, with continued support from DFID, UNDP aims at

8 This evaluation is primarily based on sources on the part of the project implementing institution. The transition extension of the project was launched in August 2018; hitherto, information has been scarce. strengthening the local capacities of municipalities, and jointly identifies and implements climate-resilient development projects at grassroots level (UNDP 2018a).

Room for Improvement and Challenges

One barrier for this logic can be opposition from the treasuries in the respective countries as the influence of central banks gets reduced in this model. Furthermore, cutting out players from the disbursement process also reduces the checks and balances to avoid misappropriation of funds.

A barrier for using public finance management systems are procurement rules which significantly extend the timelines of project implementation. Furthermore, operational systems to run the local governments on a day-to-day basis are still evolving. As mandated by Nepal's Constitution 2015, there has been a substantial devolution of functions to provincial and local governments. This has enabled them to formulate laws to engage development planning and implementation, including climate change adaptation. However, in this context, many local governments need to strengthen their institutional capacity in terms of human resources and infrastructure to implement projects and manage funds (UNDP 2018a).

4. Pilot Program for Climate Resilience (PPCR) and Forest Investment Program (FIP)

Introduction

The Pilot Program for Climate Resilience (PPCR) is a funding mechanism under the Climate Investment Funds (CIF) which helps developing countries to integrate the topic of climate resilience into their development planning. Furthermore, it supports countries to effectively build on their National Adaptation Programs of Action (NAPAs) and fund public and private sector investments (Climate Investment Funds 2018a).

The Forest Investment Program (FIP), as a targeted programme of the Strategic Climate Fund (SCF) within the CIF, supports developing countries' efforts to reduce deforestation and forest degradation (REDD), and promotes sustainable forest management that leads to emission reductions and the protection of carbon reservoirs (African Development Bank Group 2018).

Elevator Function

The PPCR helps eligible countries to develop investment plans led by MDBs and national focal points. Through participatory processes, local (indigenous) communities can get involved as potential executing entities, providing inputs into adaptation solutions and local knowledge (IIED 2017). The programme further supports least developed countries (LDCs) in strengthening and expending their NAPAs, which provide an instrument for LDCs to identify priority activities that respond to their urgent and immediate needs with regard to adaptation to climate change. Within the NAPA process, community-level input is perceived as an important source of information, recognising grassroots communities as the main stakeholders. Through the integration of local realities in the pro-

grammes of action, subsequent funding can be directed so that it responds to immediate needs, even at the lowest level (UNFCCC 2018). The FIP strives to empower developing countries in managing natural resources in a sustainable way by providing direct investments that are aimed at tackling the drivers of deforestation and forest degradation, as well as awarding grants and low-interest loans to help governments, communities, and business stakeholders (Climate Investment Funds 2018b). In order to facilitate the access for weaker national organisations, applicants for the FIP only need to provide a brief project proposal for grants under USD 50,000. Furthermore, national-level multi-stakeholder steering committees, which are expected to include representatives from indigenous and local authority forest communities, identify and approve projects while assisting in planning, implementation, and monitoring (IIED 2017).

The FIP Dedicated Grants Mechanism (DGM), a global initiative that supports the full and effective

participation of indigenous peoples and local communities, puts emphasis on capacity building – a core part of their investment strategies. DGM country projects provide grants and technical support directly to grassroots organisations of indigenous peoples and local communities in target areas (DGM Global 2018).

Room for Improvement and Challenges

Modalities and benefits for regional approaches of the PPCR still remain unclear (World Bank Group n.d.). Although there is a strong focus on stakeholder consultation in the development of Strategic Programs for Climate Resilience (SPCR), the identified priorities for implementation were often ambiguous in the past. Moreover, dialogue and engagement have not always been sustained after the elaboration of the SPCR, which inhibited the development of strong and inclusive stakeholder networks with the capacity to support SPCR project interventions (ODI 2014).

Example

PPCR Mozambique (since 2011)

The CIF supports Mozambique through the PPCR with USD 86 million for enhancing infrastructure upgrades, better resource management, extended climate services, and the development of local and national capacities for climate resilient planning and action (Climate Investment Funds 2018c).

The AfDB collaborated with the government of Mozambique and other partners to develop a PPCR

investment strategy by which climate change should be mainstreamed in central budgets and planning, sectoral investments, and the private sector. Based on Mozambique's NAPA priorities, it aimed to strengthen early warning systems, build the capacity of farmers to deal with climate change at a local level, reduce the impacts of climate change along the coastal zone, and improve water resources management (African Development Bank 2018).

5. Global Environment Facility's (GEF) Small Grants Programme

Introduction

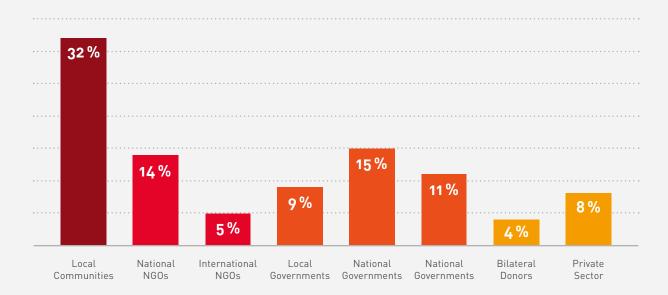
The GEF Small Grants Programme (SGP) provides financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods. The programme provides grants of up to USD 50,000 (averaging USD 25,000 per project) directly to local communities, including indigenous people, community-based organisations and other non-governmental groups for projects in Biodiversity, Climate Change Mitigation and Adaptation, Land Degradation and Sustainable Forest Management, International Waters as well as Chemicals (The GEF Small Grants Programme 2012a).

Elevator Function

The GEF SGP has participatory funding structures whereby local communities are able to engage directly in the design, appraisal and evaluation of climate and development projects (IIED 2017). Various partners contribute co-financing to SGP projects, among them communities, national and international NGOs, local and national government agencies, multilateral organisations, and the private sector (see FIGURE 3). This multi-stakeholder approach facilitates the inclusion of local needs into planning and implementation processes and directs funding towards effective programmes at the local level.

FIGURE 3

Share of SGP Co-Financing of Partners (1992 – 2015)



Source: Based on (UNDP 2017c)

Almost all SGP-supported projects include capacity building, communications and experience-sharing elements (The GEF Small Grants Programme 2012a). The Programme performs its project selection and review through national-level multi-stakeholder steering committees, which include local community and NGO representatives. These projects are selected from 'country programme strategies' that themselves are developed through participatory processes (IIED 2017).

The SGP provides much smaller allocations, so called planning grants, of between USD 2,000 and USD 5,000 to community-based organisations to access local capacity support. Moreover, the dedicated direct access funding modality of the GEF provides support to environment and sustainable development efforts of communities and local CSOs (UNDP 2017c).

Room for Improvement and Challenges

The Joint Evaluation of the GEF Small Grants Programme (2008) found that, since SGP inception, 60% of its projects have directly or indirectly targeted the poor or the poorest and at least 15% of SGP grants explicitly targeted indigenous people. However, in most instances, indigenous people benefited from the SGP project grants because they are generally settled in remote biodiversity-rich areas that are the geographic focus of the SGP country programmes rather than being explicitly targeted by the programmes. Moreover, in some countries, the local sociocultural context may constrain women's participation; in others, their participation may be in roles that contribute little to their empowerment (Global Environment Facility Evaluation Office 2008). Yet, the inclusion of women and indigenous people is vital to ensure that local challenges are inclusively tackled in the programme design and that adaptation finances are channelled to where it is needed.

Example

Community-Based Adaptation (CBA) Project: Bolivia (since 2009)

The Community-Based Adaptation (CBA) Project is funded mainly by the GEF with USD 4.5 million and implemented by UNDP through the GEF SGP with the support of UNDP Country Offices. The goal of the

project is to strengthen the resilience of communities addressing climate change impacts, test the Vulnerability and Resource Assessment (VRA) tools and other community-engagement instruments as well as to generate knowledge and lessons for replication and upscaling (The GEF Small Grants Programme 2012b).

Community-based adaptation projects in Bolivia focus on rural livelihoods and ecosystems in the context of water, agriculture and health, in the face of flood, drought and erosion due to climate change. All CBA projects involve NGOs at the local and national levels.

Bolivia's CBA portfolio includes a total of six projects:

- Water Source Protection and Soil Conservation through Reforestation in Batallas Municipality
- 2. Participatory Adaptation Learning to Reduce Food Insecurity in Ancoraimes
- 3. Sustainable Management of the Cherimoya Crop for Climate Change Adaptation in Saipina

- **4.** Knowledge and Tools for Sustainable Management of Water and Soils in Moro Moro
- 5. Rural Water and Climate Risk Management in the Alto Seco Area
- 6. Recovery of Tarwi Seeds for Adaptation in the Carabuco Municipality Near Lake Titicaca

However, it is worth noting that, despite a strong conceptual approach, there have been issues with the implementation of the project, according to local contacts. Several activities did not get followed through properly and parts of the allocated funds could not be accessed according to plans due to procedural hurdles.

6. The Local Climate Adaptive Living Facility (LoCAL)

Introduction

The Local Climate Adaptive Living Facility (LoCAL) of the UN Capital Development Fund (UNCDF) has been established in 2011 to address the unfunded mandate of local authorities in implementing climate change adaptation. It serves as a mechanism to integrate the topic into local governments' planning and budgeting systems, to increase awareness of and response to climate change at the local level, and to raise the amount of finance available to local governments (UNCDF 2014).

Elevator Function

LoCAL combines performance-based climate resilience grants (PBCRGs), which ensure programming and verification of climate change expenditures at the local level, with technical and capacity-building support. The facility aims specifically to enhance mainstreaming of climate change adaptation into local government's planning and budgeting systems (output 1), increase awareness of and response to climate change at the local level (output 2) and increase the amount of climate change adaptation finance available to local governments and local economies (output 3), while being implemented effectively, efficiently and transparently in line with UNCDF programme management regulations (output 4) (UNCDF 2018).

LoCAL channels international climate finance to local government through existing fiscal transfer systems, providing additional funds to cover the increased costs associated with adaptation investments. In doing so, LoCAL clearly defines how funds flow from UNCDF or other partners to the national government

and from the national government to local authorities. Although existing fiscal transfer mechanisms might be challenged by political instability or be otherwise constrained, LoCal is designed in a flexible manner in order to efficiently adjust fund flows while integrating them into evolving country systems (UNCDF 2017).

Apart from supporting the transfer of functions und funding to local governments, the facility is addressing some of the most critical barriers for accessing climate change adaptation finance with regard to limited technical capacity. The LoCAL methodology is strengthening the capacity of local governments to plan, budget, implement, monitor and evaluate climate change adaptation measures. Local governments are learning by doing through LoCAL processes and tools, which can contribute to a behavioural change, raise awareness and promote a bottom-up approach, with a more pro-active attitude from local governments (UNCDF 2018).

Room for Improvement and Challenges

Planning is a key issue for any LoCAL initiative as the facility relies on existing mechanisms and their credibility with regard to effective transfers of resources that should be based on predictable allocations. However, some countries may experience fragmented sources of funding, unclear or delayed budget allocations and a history of late or lower-than-budgeted releases. This might hamper a meaningful planning process at the local level and affects the ability of local administrators to engage either with communities or politically (UNCDF 2017).

Furthermore, evaluation reports identify the limited coordination with other institutions, such as line ministries as a major issue. Besides, the current approach is hardly capable of being scaled up to a larger number of districts as the workload for the responsible staff

would be too heavy. Even though LoCAL has made efforts to mobilise additional resources to cover more districts and give continuity to the approach at the national level, the financial sustainability is one of the programme's major challenges (UNCDF 2018).

Example

LoCAL-Cambodia (since 2011)

Cambodia was one of the first countries to pilot the Lo-CAL mechanism. The Local Governments and Climate Change (LGCC) initiatives were designed to support the capacity of the local government to implement climate change adaptation CCA and increase the resilience at the local level. After Phase I and Phase II of the project, the Performance-Based Grant Mechanism has improved the government's capacity to produce the local infrastructure, which increased the communities' resilience to climate change effects in the region. At the same time, the programme influenced policy in mainstreaming climate change adaptation into the local government planning and also the role of local government in implementing adaptation projects (UN-CDF 2016).

7. Decentralised Climate Adaptation Funds

Introduction

Decentralised climate adaptation funds use existing local governance systems to disperse money in a way that empowers communities and builds climate change resilience. With local players deciding on the priorities, the funds can reach those most vulnerable to climate change. Governments in Mali, Senegal, Tanzania and Kenya are currently establishing decentralised climate adaptation funds to pilot the approach. The projects are funded by UK aid (IIED 2016b). In future, the approach could be used to access and distribute international climate finance, once the required systems are in place at national and local level.

Elevator Function

Decentralised climate finance has the potential to deliver climate funding that is equitable and responsive to the needs of local people. Governments in the piloting countries have established mechanisms that enable them to access climate finance and channel it to CAFs at local government level, where the money can then be planned and budgeted in partnership with communities (IIED 2016b).

The decentralised management of climate change funds by local authorities and communities requires reliable institutional and financial structures. The aim of the Decentralising Climate Funds (DCF) project is to provide a model for flexible ways of channelling resources from the GCF and other sources to support investment in adaptation measures prioritised by local people (IIED 2016a).

Including local knowledge and experience in government planning is vital to the success of the investments (IIED 2018b). If investments in adaptation are to ensure resilience to climate change, local knowledge and perspectives must be integrated into the formal planning process of local authorities. Local authorities must also have discretionary powers over their budgets, to ensure they have the freedom to support effective local strategies and to take timely decisions in the face of a rapidly changing and unpredictable local context (IIED 2016a).

To ensure an inclusive planning process, adaptation planning committees are created at both community and local government level. At community level, they are made up of individuals chosen by their communities for their integrity and relevant knowledge. They consult locally on what should be the best investments in public goods. They prioritise them according to criteria developed together as a community. These measures are financed by the decentralised climate adaptation fund, e.g. improving water sources, support for farmers, or research and supporting access

to vaccination for livestock diseases. The adaptation planning committee at local government level consists of government staff and community members. They provide advice and technical support to the community level committee and prioritise investment from funds that build resilience to climate change at local government level, e.g. financing access to climate finance information (IIED 2016b).

Putting them at the centre of development will allow communities to build structures that recognise their experiences and local or customary knowledge to managing risk and sharing prosperity (IIED 2018c).

Room for Improvement and Challenges

In theory, the approach offers a framework for governance that gives more power to local governments. However, in practice, decentralisation has often only been partial. National or regional governments often try to hold on to authority or financial resources, meaning that discretionary authority and the financial and technical resources to make smart, context specific, holistic decisions are not passed down in full. With regard to land or natural resource governance, for instance, grants designed to respond to local needs are still guided by centrally-set policies (IIED 2018c).

Example

Decentralising climate adaptation funds in Mali

The decentralised climate finance mechanism in Mali is one practical example of how devolved government structures can be used to channel climate finance to the local level effectively and efficiently (IIED 2016b). As part of the DCF project, this initiative is implemented by the Near East Foundation (NEF) with Innovation, Environnement et Développement en Afrique (IED Afrique) and the IIED (BRACED 2018).

The three Cercles of Douentza, Koro and Mopti (Cercles are local administrative regions in Mali) pilot the approach which enables them (i) to access climate funds to finance local adaptation and (ii) to integrate

resilience to climate change into their planning and budgeting systems (IIED 2016a). The project seeks to build the resilience of 750,000 people to climate variability and extreme events (IIED 2018b).

The National Agency for Territorial Collective Investments (ANICT) has been nominated by the NDA as the country's first prospective National Implementing Entity. ANICT planned to apply for accreditation in 2018 and at the same time is working on an Enhanced Direct Access project proposal to extend the devolved climate finance mechanism to more local governments in new regions. If successful, this work would start in 2019 (IIED 2018b).

8. Dedicated Credit Lines

Introduction

A credit line is a financial tool that involves one financial institution providing a flexible loan scheme to a second institution to 'on-lend' to its customers (Institute for Climate Economics 2017). Credit lines are prominent mechanisms to foster investments, e.g. in energy efficiency or other green projects. In the same way, credit lines can help banks establish an adaptation oriented business line by mitigating the perceived high financial risk of adaptation projects and of the companies that carry them out. They also reduce the transaction costs of project finance by standardising the process of project appraisal and loan processing. For project developers, credit lines expand the pool of commercial debt financing for their adaptation projects.

The French development finance institution Proparco, for instance, supports private actors through financial intermediation in investing in environmental, renewable energy and energy efficiency projects. Within the scope of 14 green credit lines in Asia and Latin America, local financial institutions receive financial credits for climate-related development projects (PROPARCO 2018).

Elevator Function

Generally, end borrowers of credit lines are small and medium sized enterprises. Their business activities can constitute important investments in climate change adaptation at community level: Dedicated credit lines normally set out a list of eligibility criteria for certain standards that must be achieved or technologies that can be financed. Similar to the case of energy efficiency credit lines (OECD 2014), adaptation credit lines could be issued alongside more general SME credit lines and blended for the purposes of on-lending. Credit lines are especially useful as a source of emergency funds on a quick, as-needed basis or in situations where there will be repeated cash outlays but the amounts may not be known upfront (Investopedia 2018). Thus, local enterprises in countries with high vulnerability to climate change effects can benefit from the flexible loan a credit line provides.

Furthermore, credit lines may be able to leverage external public finance provided by international donors, climate funds, or national governmental budget funds. In addition to channelling capital from international capital markets, they can help public financial institutions leverage domestic private co-financing by requiring participating intermediaries (Institute for Climate Economics 2017).

Different financial components of credit lines can help address some of the general investment barriers to green lending, which can be applied accordingly to the adaptation sector: For instance, some public financial institutions provide concessions indirectly through incentive payments that usually target end-borrowers and are typically structured as ex-post grants that reimburse parts of the investment financed by the credit line. Beyond that, credit enhancement mechanisms, such as guarantees, can support the uptake of loans by increasing demand for adaptation projects and channelling concession conditions indirectly to end-beneficiaries (Institute for Climate Economics 2017).

Apart from the financial flows, a targeted policy dialogue with local governments aims at improving the general investment climate for projects with environmental outcomes may also be performed by public financial institutions. The policy engagement with regional governmental bodies on their investment plans, legislation, and policy can be part of a broader strategy of fostering adaptation investment at a local level. Moreover, technical assistance can be offered alongside the credit line's financial support to both

local financial institutions and end-users to lower the technical and financial risk of projects and address market barriers on both the demand- and supply-side (Institute for Climate Economics 2017).

Room for Improvement and Challenges

Although the international community is aware of the need to combine the financing of mitigation and adaptation actions, financing adaptation projects is still largely excluded from green credit lines in practice. As adaptation investments are often characterised by large upfront costs, long payback periods, and uncertainties related to future climate impacts, these constraints currently limit banks and other financial intermediaries' interest in engaging in adaptation lending. Apart from that, adaptation projects may have both direct and indirect benefits that require different assessment methods than more mainstream mitigation investments (Institute for Climate Economics 2017). One alternative could be to make the adaptation finance component an add-on to a credit line in the form of a grant or projects that have assessed their risk from climate change could be offered lower interest rates. This could raise awareness and willingness to engage with adaptation as a risk to business.

Generally, credit lines provided at below market rates come with high risk of market distortions: By offering funds on concessional terms, public financial institutions may unintentionally subsidise local institutions if financial benefits are not effectively passed down to end borrowers. Hence, this may prevent private banks from entering the market due to below-market rates or local financial institutions may in fact simply continue to provide business-as-usual loans to investment projects while benefitting from profits which in turn affect the competition among local institutions. Furthermore, even if the benefits are passed on to end-borrowers, dedicated credit lines may not have a direct impact on the expansion of e.g. green lending by local financial institutions, raising questions about the tool's measurable benefits and sustainability (Institute for Climate Economics 2017).

Examples

Climate Resilience Credit Line (EBRD)

(since 2015)

The financing facility from the European Bank for Reconstruction and Development (EBRD) combines commercial and concessional funding to scale up financing for climate resilience through local banks and microf-

inance institutions as well as providing advice for clients. The funds are on-lent in local currency to SME clients and households to help them adopt technologies and practices to reduce soil erosion and pressure on water and energy resources, both of which are key environmental threats in Tajikistan.

The EBRD is already running successful credit lines for energy efficiency and small-scale renewable energy in most of its countries of operation (EBRD 2015).

The Climate Change Adaptation Line of Credit in Jamaica (since 2015)

The Government of Jamaica, in collaboration with the Inter-American Development Bank (IDB) and the World Bank, developed Jamaica's PPCR to help the country strengthen its resilience to climate change through enhancing adaptive capacity across priority sectors. Two financial mechanism have been created: Under the Climate Change Adaptation Line of Credit (CCALoC) administered by the Jamaica National Small Business Loans (JNSBL), the climate change loan programme provides business ventures with loan financing of between USD 200,000 to USD 5 million in respect to climate change adaptation activities and the projects' viability. The loan funds are made available to businesses in the agriculture and tourism sectors and ought to augment climate change resilience through the use of adaptive or mitigation strategies with respect to the effects of climate change (Jamaica National Small Business Loan 2017).

9. Microfinance

Introduction

Microfinance is a financial system provided to target groups who otherwise would have no access to financial services. It includes microcredit, saving and insurance services, and sometimes financial literacy education. Usually, microfinance institutions (MFIs) disburse loans as small as USD 50, administered through relatively high interest rates and frequent loan repayments. Borrowers often pool together in groups that share responsibility for these payments, as the costs associated with monitoring loans and enforcing repayment are significantly lower when credit is distributed. If a member defaults on his or her payment, then the others are obligated to repay it (Hammill et al. 2008).

As climate change is a threat to which the poor are acutely vulnerable, microfinance as a tool can play a considerable role to enhance households' livelihood asset base through its financial (increase in household assets), social (strengthening of social networks), natural (practices, e.g. of sustainable soil management techniques as a loan condition), human (skills, training, education), and physical (loans for equipment/infrastructure, sanitation improvement) contributions (Hammill et al. 2008).

Elevator Function

Microfinance could prove useful in channelling money for grassroots adaptation, as microfinance institutions operate at the local and, therefore, same level where most adaptation will occur. As a development mechanism, the delivery of microfinance is perceived as an attractive vehicle for facilitating adaptation and bringing money to low-income households. MFIs can provide poor people with the means to diversify, accumulate and manage the assets needed to become less

susceptible to shocks and stresses and/or better able to deal with their impacts (Hammill et al. 2008). It is worth noting that the investment resulting from the loan should be linked to increased economic activity (e.g. higher returns from farming activities) to ensure payback of the loan.

Successful microfinance goes beyond simply ensuring adequate finance and requires adequate systems for policy, planning and budgeting to ensure a country's readiness. Thereby, adaptation on community level, the development of a country-wide political economy approach, and microfinance are interconnected (IIED 2011). The PPCR identifies three successful mechanisms in applying microfinance as an enabler of climate resilience from the top to the bottom level (PPCR 2018).

- Extending a line of credit by using a private sector cooperative mutual bank as the intermediary institution (Jamaica).
- 2. Dual model of strengthening and building absorptive capacity at government and community level through direct and indirect action, and leveraging further climate resilience funding on the back of demonstrated success (Tajikistan).
- 3. Highly centralised, state controlled modality for disbursing funds to communities (Mozambique).

Room for Improvement and Challenges

Despite the potential of microfinance to steer adaptation finance towards the local level, the tool can only target the economically active poor and typically does not reach the lowest level of society – though the poorest are often the most vulnerable to climate change and should therefore be an adaptation priority (Hammill et al. 2008). Furthermore, it might be questionable to in-

troduce resources into a community that serve mainly to help people cope with poverty and that are not very likely to be a pathway to adaptation itself. In order to successfully steer adaptation money towards the local level, vulnerable communities have to be aware of, and have access to, the funding. This comes along with the necessity for reliable data and information – due to a lack of controllability, oftentimes, money for climate change adaptation is used for buying food instead of the intended activities (PPCR 2018). Therefore, microfinance has to be coupled with education, or coordinated with other country growth strategies or market interventions, that promote a longer-term view to sustainable economic development. If not, microfinance might lead borrowers into a debt trap and could even increase vulnerability (Hammill et al. 2008).

Finally, poor cooperating relationships between multilateral development banks and country counterparts, as well as low capacity of government institutions interfere with the disbursement of funds. The big challenge is closing the gap between climate finance access which is usually at the project level and the path down to the community level (PPCR 2018). Therefore, it is important to consider to what extent microfinance might fill the gaps left by fragile state structures: by relieving those systems through the provision of basic services, they might actually confirm inefficient policies (Hammill et al. 2008).

Examples

Microfinance for Ecosystem-based Adaptation (MEbA)

(since 2012, Phase I: Colombia and Peru) (since 2018, Phase II: Colombia, Peru, Ecuador, El Salvador, Costa Rica, Dominican Republic, Benin, Madagascar, Senegal)

The MEbA project seeks a paradigm shift through private sector engagement in adaptation finance by facilitating microfinance products aimed at small-scale farmers to invest in ecosystem-based adaptation (EbA) options. The project is funded by the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany (BMU), under the framework of the International Climate Initiative (IKI).

A majority of the population in the Andean region of Colombia and Peru has limited economic resources and is highly dependent on agriculture. The MEbA project provides technical assistance to Microfinance Institutions (MFI) so they may autonomously disburse loans oriented towards EbA options which allow farmers to invest in sustainable adaptation practices, decrease their dependency on agriculture, and improve their income and resilience towards climate change (GIZ 2018).

MEbA builds capacities in the following areas: awareness raising among small-scale farmers on climate impacts and EbA alternatives, MFI staff training on key climate change and environmental conservation concepts, management of agro-climate risks and improvement of information management systems, development of EbA-oriented micro-lending services as well as fostering partnerships with technical entities.

MFIs incorporate the tools provided by the project to increase the climate resilience of their clients and overall portfolio. The main climate challenge identified locally was increased temperatures and landslides as well as flooding caused by extreme rainfall. Resulting yield losses are exacerbated by currently poor farm management practices and limited access to financial resources. The programme is aiming to help farmers adapt to climate hazards by identifying local adaptation measures and financing them with favourable conditions.

Initially, three MFIs in Colombia and two in Peru participated in the project. Now, in its second phase, 12 MFIs are participating from 6 Latin American and 3 African countries.

Self Employed Women's Association (SEWA)

(since 1972)

The Self Employed Women's Association (SEWA) in India is an organisation of poor, self-employed female workers who earn a living through their own labour or small businesses. SEWA Bank developed different schemes to promote capitalisation in India's urban and rural areas — one of them being the Housing Finance Scheme (Self Employed Women's Association 2009). It offers housing loans to repair or replace roofs, reinforce walls, or rebuild in less hazard-prone areas, which can be key for reducing vulnerability to extreme events such as floods, droughts and storms (Hammill et al. 2008).

10. Direct Climate Risk Insurance

Introduction

Insurance is a typical risk sharing/alleviating instrument: While through indirect insurance approaches, the final beneficiary benefits from payments intermediated by an insured government or from being member of an insured institution, direct insurance instruments benefit the insured beneficiary directly by transferring risk to a risk-taking entity (such as an insurer) in the event the insurance agreement is triggered (GIZ 2015). The insured individual pays a premium to the insurer that covers the risks regarding one or more climate variables. Compensation through a direct pay-out then depends on the assessment of losses caused by the specified variables, e.g. crop loss in agriculture (direct loss) (European Climate Adaptation Platform 2015). In contrast to indirect insurances, which work at a macro level (e.g. regions- or country level) and therefore hardly target the specific needs of communities and individuals, direct insurances at micro level are specifically designed to protect low-income individuals and households against diverse risks and thus reach the local level (Hermann et al. 2016).

Elevator Function

The development of microinsurance for low-income communities promises to address economic risks related to climate change at a local level. Instead of funding the recovery measures for a large part of the population, policyholders are directly addressed after an individual assessment and quantification of their personal losses. In case of an index-based scheme, policyholders can be compensated even more quickly than through conventional indemnity or indirect insurance solutions on the macro level, where bureaucratic obstacles might delay pay-outs (Hermann et al. 2016).

Insurance is traditionally operated by the private sector. However, beyond the fact that it is one of the most regulated financial sectors in many countries, successful climate insurance requires the inclusion of many different actors. Government institutions have an important role to play: They provide support to develop the market for innovative extreme-weather insurance and adapt the regulatory and institutional frameworks so that climate insurance products can be promoted (Global Water Partnership 2018). Regarding the high costs of insurance premiums, *multi-layered insurance programmes* can be promising public-private partnerships that provide adequate incentives to

overcome capital shortages in insuring large catastrophe losses. Since every place is exposed to some natural hazard, the creation of a larger (cross-border) insured community leads to lower premiums (European Climate Adaptation Platform 2015).

Apart from providing an adaptation tool per se, the insurance sector can play an important role in animating local communities to invest in adaptation measures on the ground. One option is linking microinsurance to the financing of adaptive measures, such as protecting investments in agricultural improvements (UNFCCC 2008), so that adaptation is encouraged. Securing investments in innovative adaptation products deliver long-term benefits for communities.

At the local level, the insurance industry can build adaptive capacity through the financing it provides subsequent to an insured event. An important factor is that insurance companies have more direct access to home owners and can demand prevention measures when setting the level of insurance premiums. If, for instance, flood damages were covered by state funds only, there would be limited incentives for those in the private sector to minimise their own risks (CoastAdapt 2016).

Room for Improvement and Challenges

The extent to which insurance instruments encourage adaptation programmes and policies that serve to minimise future loss and damage is unclear (Global Water Partnership 2018). Insurances often come with the threat of moral hazard: due to the temptation of instant gratification, households might actually increase their exposure to risk when insured in order to obtain a less rewarding but more immediate benefit.

Overall, the extent to which insurance mechanisms are deployed as actual financing mechanism to the climate change adaptation sector is still quite limited. People do not get money to adapt, but mostly for disaster recovery after a natural disaster. While some insurance companies require risk minimisation through adaptation measures, policyholders do not necessarily receive any money from the insurance companies in return — at most, they benefit from lower premium payments. At the same time, climate insurance is indirectly aligned to the economic realities of adaptation as premium policies incentivise investments in adaptation and insurance companies develop an intrinsic drive to engage in the fight against climate change.

Examples

National Agricultural Insurance Scheme (NAIS)

[1999 - 2013]

The Indian National Agricultural Insurance Scheme (NAIS), up to 2013, incorporated the coverage of crops such as paddy, banana, tapioca, ginger, turmeric and pineapple as a part of risk management. It covered all farmers under the scheme, irrespective of their size of holding. The premium rates varied from 1.5% to 3.5% of sum assured for food crops. Small and marginalised farmers were entitled to a subsidy of 50% of the premium charged; the subsidy was shared equally between the Government of India and the States (Government of India n. d.).

Global Index Insurance Facility (since 2009)

As a dedicated World Bank Group's programme, the Global Index Insurance Facility (GIIF) facilitates access to finance for smallholder farmers, micro entrepreneurs, and microfinance institutions by providing catastrophic risk transfer solutions and index based insurance in developing countries.

Index insurance is an innovative approach to insurance provision that pays out benefits on the basis of a pre-determined index or loss of assets and investments resulting from weather and catastrophic events, without requiring the traditional services of insurance claims assessors. The mechanism can help stabilise income for small businesses and farmers when crops are adversely affected by weather, thereby improving livelihoods and assets, and building resilience against climate risks (GIIF 2018).

Caribbean Catastrophe Risk Insurance Facility (CCRIF) (since 2007)

In 2007, the Caribbean Catastrophe Risk Insurance Facility (CCRIF) became the world's first regional risk pool to cover hurricanes, earthquakes and, more recently, excess rainfall. It provides a solution to the short-term liquidity needs of small island states in the aftermath of natural disasters by offering governments timely funding which stabilises and fosters the recovery of a large number of the affected population. The CCRIF provides participating governments with coverage tailored to their needs at a significantly lower cost than if they were to purchase it individually in the financial markets (CCRIF 2015). The use of parametric insurance policies ensures quick pay-outs after the occurrence of a climate event while leaving the respective finance minister with complete flexibility in the allocation process.

CCRIF is mainly a risk financing instrument that complements and supports macro-fiscal frameworks and public financial management; it does not have a direct mandate to help poor and vulnerable groups, but may still do so indirectly. Since its establishment, CCRIF has paid out USD 135million in 13 countries, addressing various country needs after natural disasters, e.g.

- Turks & Caicos: temporary feeding stations for displaced people
- St. Vincent & Grenadines: building materials to rebuild damaged homes
- Saint Lucia: clear roadways, stabilise drinking water plants

Furthermore, the CCRIF has established relationships with local insurance companies in the development of the Loan Protection Cover (LPC). This is an insurance mechanism providing protection against default for financial institutions that have significant portfolios of individual and small business loans exposed to weather risks. Another product developed under the project is the Livelihood Protection Policy (LPP), which provides insurance coverage to low-income individuals for extreme weather events such as rainfall and wind (CCRIF 2015).

II INSTRUMENTS FROM OTHER SECTORS THAT COULD BE ADOPTED

Effective financial instruments need to entail suitable elevator functions which ensure that funding reaches communities. This chapter highlights such operating principles from sectors other than climate change adaptation that help overcome the identified challenges and successfully channel finance from the international to the local level.

TABLE 4

Instruments from other sectors that could be adopted

	CHALLENGE		Too little funding efficiently and effectively directed to the local level	Available funds not adapted to local needs / realities	Local structures and capacities not sufficiently developed
1.	World Bank's Community-Driven Development Programmes	C*	×	×	(×)
2.	Direct Payments: The EU Common Agricultural Policy	C*	×	×	
3.	Public Works Employment Schemes	C*	×	(×)	(×)
4.	Community-led Local Development (CLLD): European Maritime and Fisheries Fund (EMFF)	H*	×	×	×
5.	Frontier Funds	H*	×	×	
6.	Cash Grant Distribution via Social Funds	В*	×	×	×
7.	Challenge Funds	В*	×	×	
8.	Decentralised Financing Policies	В*	×	×	
9.	Crowdfunding	В*	×	×	
10.	Bonds	В*	×	×	

^{*}C = concrete programme; H = hybrid between concrete programmeand broad type of instrument; B = broad type of instrument

Source: Authors' own depiction

1. World Bank's Community-Driven Development Programmes

Introduction

Since the late 1990s, the focus of the World Bank's lending support in the areas of community-based development (CBD) and community-driven development (CDD) projects has notably shifted toward CDD (World Bank 2005).

CDD programmes operate on the principles of transparency, participation, local empowerment, demand-responsiveness, greater downward accountability, and enhanced local capacity. The programmes respond to a variety of urgent needs, including access to clean water, rural roads, school and health clinic construction, nutrition programmes for mothers and infants, and support for micro-enterprises (World Bank 2018b).

Elevator Function

CDD's approach of partnering with communities and local units of government has been used by many national governments as a key operational strategy to address poverty and inequality.

CDD programmes that make use of explicit mechanisms, such as poverty maps, have been successful in achieving greater resource allocation to poorer areas, although not always to the poorest communities in the respective regions. Also, community-driven reconstruction programmes are generally successful in reaching conflict-affected areas (International Initiative for Impact Evaluation 2018). According to the World Bank's own experience, the programmes have shown an ability to deliver an increase in access to quality infrastructure and services in a cost-effective manner. Also, they can ensure broader community support through the identification of local priorities and by working in partnership with local governments and other institutions. Putting resources under the direct control of community groups has led to the efficient delivery of basic services, and, when sustained over time, measurable reductions in poverty (World Bank 2018b).

Room for Improvement and Challenges

The International Initiative for Impact Evaluation found that CDD programmes have made a substantial contribution to improving the quantity of small-scale infrastructure, whereas they have a weak effect on health outcomes and mostly insignificant effects on education and other welfare outcomes (International

Initiative for Impact Evaluation 2018). Moreover, CDD projects face the general risk of reinforcing the creation of 'parallel' structures as they often bypass the lowest formal level of administrative decentralisation – which for political, financial, or technical reasons is usually at district, municipal, or provincial level. Beyond that, elites tend to appropriate the CDD process, impeding the inclusion of the communities' priorities at the lowest level. Also, there is no evidence that programme implementers managed to facilitate the participation of different ethnic and religious, or overall marginalised groups living in a community. Thus, CDD programmes have no proven impact on social cohesion or governance. Furthermore, CDD projects highly depend on frontline staff that ensures the successful channelling of resources and the development of necessary structures (International Initiative for Impact Evaluation 2018; Wong and Guggenheim 2018). Finally, CDD programmes are complicated to apply to urban areas as those often lack the normative and integrative institutions that make community negotiations and the enforcement of sanctions possible. Their populations are fluid and unlike in rural areas, where people make their living from the same place where they live, in urban areas the primary development issues are often issues of access to jobs, housing, and transportation (Wong and Guggenheim 2018).

Potential for Adaptation Finance

Weak governance is one of the key challenges for the effective financing of local adaptation measures in LDCs. CDD provides an important instrument for empowering communities and delivering services to otherwise under-served populations. CDD programmes operate on the principles of community focus, participatory planning, community control of recourses, community involvement in implementation, and participatory monitoring. This approach allows for a better targeting of adaptation funding so that resources reach socially and geographically excluded groups.

Climate science might be limited at the local level; yet, community members often have strong expertise and experience in building resilience. The "autonomous adaptation" strategies that communities use to manage risk are often poorly understood or ignored by governments and international donors. Through tools such as participatory scenario development (PSD), CDD programmes help to identify locally relevant pathways

and social innovations that are already taking place at the local level so that those can be effectively supported (World Bank 2014).

Furthermore, by building on already existing local infrastructure, CDD finance can facilitate the development of social safety nets for vulnerable groups and fosters the empowerment and adaptation capacities of local communities.

Beyond that, CDD programmes already reach large numbers of poor people in over 100 different countries. Although they often start out as small-scale operations, the following generations of these programmes often scale up to regional or national levels and have the potential to deliver resilience support at a greater scale (World Bank 2014).

Examples

Citizens' Charter Afghanistan Project (since 2017)

The development objective for the Citizens' Charter Afghanistan Project is to improve the delivery of core infrastructure and social services to participating communities through strengthened Community Development Councils (CDCs) (World Bank 2018a). It aims to reach 8.5 million people in its first phase, providing them access to basic services, such as water, roads, irrigation, electricity and monitoring of education and health services. The project works through a participatory CDD approach which is intended to increase citizen satisfaction and trust in government (World Bank 2018b).

As the Citizens' Charter Afghanistan Project just recently started its implementation, it is too early to evaluate its success. However, it builds on the National Solidarity Program (its predecessor) which had quite a good reputation.

Strengthening Climate Resilience Project for Zambia (2013 – 2019)

The development objective of the Strengthening Climate Resilience Project for Zambia is to strengthen Zambia's institutional framework for climate resilience and improve the adaptive capacity of vulnerable communities in the Barotse sub-basin (World Bank 2018c). The project is piloting a way to promote innovation by providing community groups and individuals with grants for climate adaptation activities that meet certain criteria. Recipients of the grants will be first identified by local poverty assessment groups and then awarded grants based on their engagement in visible, transformative, or innovative adaptation practices. Grants are also earmarked for women-headed households in order to promote women as resilience champions (World Bank 2014).

2. Direct Payments:

The European Union Common Agricultural Policy

Introduction

Direct payment can be defined as an aimed transfer of the total financial amount into the beneficiary's (agricultural producer's) income independent from its current production and prices of agricultural products (Bečvářová 2011). The Common Agricultural Policy (CAP) is the European Union's (EU's) agricultural policy with its objectives set in Article 39 of the Treaty of Rome (1957). Since then, it has been reviewed and reformed several times. The most important milestones in recent years are the 1992 reform, the Agenda 2000, the 2003 reform, the simplification of the CAP, the 2008 Health Check and the CAP post-2013 (OECD 2013). Direct payments are granted to farmers in order to sup-

port their incomes and to remunerate them for their production of public goods (European Commission 2018b). Furthermore, the EU CAP aims at maintaining rural areas and landscapes across the EU, and tackling climate change and the sustainable management of natural resources (European Commission 2018b).

Elevator Function

EU CAP ensures income stability, and remunerates farmers for environmentally friendly farming and delivering public goods not normally paid for by the markets, such as taking care of the countryside. By providing direct funding to local actors on environmental conditions, money can be effectively channelled to lo-

cal farmers in need, while at the same time, rural areas of the EU receive support in meeting the wide range of economic, environmental and social challenges.

However, a thorough assessment of agricultural businesses is vital in order to ensure an efficient and coherent distribution of funding, and prevent a skewed farm support. Therefore, the European Commission regularly consults civil dialogue groups and agricultural committees to best shape law and policies governing agriculture on the basis of local knowledge. Furthermore, the Eurobarometer surveys, run in all EU countries, provide valuable information on citizens' perception of CAP (European Commission 2018b).

Room for Improvement and Challenges

Although supporting farm incomes on the one hand, direct payments create dependencies on subsides, influence production decisions and reduce farm efficiency on the other hand (EURACTIV 2017). It is argued that much of the CAP spending is unbalanced and that farmers do not always truly benefit because of misallocation of resources. Especially small farmers in rural areas are disadvantaged: The land-based nature of direct payments means that small farmers receive only limited support, while bigger businesses and landowners receive bigger subsidies. As about 80% of the total CAP budget has gone to 20% of recipients, it is conjecturable that small farmers are missing out, even though these small and medium-sized farm businesses are important for the local economy (euobserver 2018). Furthermore, the payments often have the knock-on effect of inflating land prices and rents as well as enriching land owners that are not necessarily farmers (EURACTIV 2017). Considering the size and maturity of this subsidy scheme, it might be questionable how easily applicable its logic might be to a developing country context.

Potential for Adaptation Finance

The CAP includes several mechanisms to enhance adaptation and to draw attention to sustainability and climate resilience through direct payments. Inter alia, it provides a basic level of income security to farmers, enables adaptation to market and agronomic conditions through decoupled support, provides a framework for sustainable management of the natural environment (cross compliance system), and opens up possibilities for targeted support to adaptation measures, involving building adaptive capacity and implementing actions (European Commission 2018c).

In general, direct payments increase communities' autonomy and open up a way for developing the decision-making capacity of local authorities as recipients are enabled to purchase the necessary equipment and carry out the implementation of the respective adaptation measures themselves. Granting funding to local authorities can hence foster innovation and flexibility since projects are based on regional know-how and locally assessed needs. This effect can be reinforced through civil society consultations and the establishment of local committees, as it is regularly done to shape laws and policies under the CAP.

In principle, direct payments could make a direct contribution to adaptation by serving as a tool for direct investments in adaptation benefits. However, due to the perceived uncertainties associated with the costs of climate change and adaptation benefits, the willingness to pay for adaptation-relevant environmental services might appear more limited than for environmental protection (Wertz-Kanounnikoff et al. 2011).

Example

Environmental Criteria as per EU CAP (since 2015)

European Union (EU) farmers receive support in the form of direct payments on the condition that they respect strict rules on human and animal health and welfare, plant health and the environment. The amount of support they receive is not linked to the quantities they produce, and is designed to provide EU farmers with a safety net against volatile market prices. Direct payments include a basic payment and

additional payments, a so called green payment for farming methods that go beyond basic environmental protection (European Commission 2018a). Farmers who do not comply with certain requirements in the areas of public, animal and plant health, environment, and animal welfare are subject to reductions of or exclusion from direct support.

3. Public Works Employment Schemes

Introduction

The term "Public Works" describes a multi-dimensional concept in economics and politics, touching on multiple areas. Typically, a Public Works Programme (PWP) covers the provision of employment by the creation of public goods at a defined wage for those unable to find alternative employment. This way, it functions as a form of social safety net. Thus, PWPs may be defined as all activities which entail the payment of a wage (in cash or in kind) by the state or by an agent in return for the provision of labour, in order to enhance employment and produce an asset (either physical or social), with the overall objective of promoting social protection (ODI 2008). PWPs are often used to engage communities in larger-scale public works activities such as the reconstruction of roads, schools and public offices as well as other physical assets and facilities (International Recovery Platform Secretariat 2010). The majority of PWPs offer either food or cash in return for physical labour and are known as food-for-work (FFW) or cash-for-work (CFW) programmes, respectively.

Originally used as tools for ad-hoc poverty relief in response to economic downturns and natural disasters, they are now increasingly used as long-term social protection tools. Four broad types can be identified (ODI 2008):

- PWPs offering a single short-term episode of employment
- Large-scale government employment programmes which may offer some form of employment guarantee
- Programmes promoting the labour intensification of government infrastructure spending
- Programmes which enhance employability

Elevator Function

Public works employment schemes are government designed projects (in contrast to livelihood-oriented CFW programs, in which participants commonly determine the specific work to accomplish) which typically invest 40–60% of reconstruction funds into local communities through wages and income. Participants in PWPs receive income in exchange for work. This income transfer immediately stimulates the local economy and benefits other local livelihoods (International Recovery Platform Secretariat 2010).

Apart from reducing poverty and fostering growth by transferring income directly to the poor, PWPs are

conceptualised to build and improve the infrastructure and/or deliver other public goods and services at the same time (die 2015). Hence, local workers do not only benefit from the direct outcome of employment provided but also indirectly as a result of the productive value of assets created.

Moreover, PWPs can foster sustainable employment at the local level by developing skills: PW schemes can raise skills levels if they include on-the-job or formal training packages that improve the quality of the labour supply. More skills and better quality labour should then translate into better employability, higher earnings, and enhanced growth and innovation that benefit the whole community (die 2015).

Room for Improvement and Challenges

The effect of public works employment schemes is dependent on the ability of the programme to transfer skills to participants successfully, and to transfer skills which match skills demand in the economy. Therefore, the approach is contingent on the labour market context being characterised by frictional rather than structural unemployment and the existence of significant numbers of unfilled job opportunities in the labour market (ODI 2008).

Community participation in project planning can have a positive impact on project maintenance, thus ensuring the sustainability of the productive infrastructure. However, the lack of local capacity often impedes project quality, making technical and managerial support from outside the community a pre-requirement for a successful implementation stage (die 2015).

Since PW programmes are capacity building projects and this learning process takes time, it is recommended for the project to continue its activities on a medium- to long-run basis. Evidence suggests that standard short-term PW programmes are not capable of encouraging productive investments by beneficiaries. The average income transfers resulting from these programmes are too low and too unpredictable to induce beneficiaries to invest more (die 2015). Furthermore, overall physical output from capacity building projects is usually rather limited compared to other projects (ILO 2007).

Potential for Adaptation Finance

PWPs offering short-term employment are typically implemented as a response to some form of tempo-

rary labour market or livelihood disruptions. These may result from economic or environmental shocks (e.g. drought, flood or hurricane) as they are caused by climate change (ODI 2008). However, PWPs do not only have the potential to finance adaptation efforts after a natural disaster, but also provide an adequate tool to channel financial assets towards the local level, where they make the necessary funds for local adaptation projects available.

In general, large-scale government employment programmes which are implemented in response to chronic or sustained levels of elevated unemployment and associated poverty aim at promoting aggregate employment on a sustained basis. Pursuing this objective is applicable in nearly any sector related to adaptation strategies: Better infrastructure, for instance, can increase agricultural output, lower transaction

costs and improve market access, thereby raising the profitability of farms and businesses and helping them adapt to new climate conditions (ODI 2008).

Furthermore, the additional income enables households to accumulate savings, which can ultimately be used for productive investments in local adaptation measures. If income transfers are regular and predictable, they could perform an insurance role, thus, altering participants' risk management capacity and willingness to take risks. This could translate into higher productive investments that should in turn boost economic activity, raise labour demand and create sustainable employment, especially in the adaptation related areas such as irrigation and water conservation projects, land development and rehabilitation projects as well as flood control and road construction projects (die 2015).

Examples

Labour-based road construction programs in Nias, Indonesia (2006 – 2008)

In partnership with the Agency for Rehabilitation and Reconstruction of Aceh and Nias (BRR), the provincial and district governments of Aceh and Nias, the Multi-Donor Fund for Aceh and Nias (MDF) and district governments, the International Labour Organization (ILO) and UNDP implemented an employment intensive infrastructure project (International Recovery Platform Secretariat 2010).

The project was aimed at contributing to the restoration of rural livelihoods and communities affected by the tsunami disaster in NAD and Nias. District governments and small scale contractors in project areas were supported to adopt and undertake local resource-based road works thereby providing access to socio-economic centres and creating job opportunities for the rural population (ILO 2007).

The initiative focused on building the capacity of district public works officials and small-scale contractors to manage, supervise, and implement the road rehabilitation employment projects. It provided the techniques, standards, systems, and strategies necessary to undertake the road rehabilitation and conducted a training of trainers for selected district public works officers. These officers trained over 70% of district public works staff and small-scale contractors in 'public works employment' approaches, including contract administration, site supervision and use of standard approaches in engaging communities in road works. This collaboration has resulted in the implementation

of new pavement techniques that address environmental protection as well as worker and community health issues (International Recovery Platform Secretariat 2010).

Expanded Public Works Programme (EPWP), South Africa (since 2004)

The programme is a key government initiative which contributes to government policy priorities in terms of decent work, sustainable livelihoods, education, health, rural development, food security, land reform, and the fight against crime and corruption.

The EPWP creates work opportunities in four sectors, namely, infrastructure, non-state, environment and culture, and social through:

- increasing the labour intensity of government-funded infrastructure projects under the infrastructure sector.
- creating work opportunities through the Non-Profit Organisation Programme and Community Work
 Programme under the non-state sector,
- creating work opportunities in public environment and culture programmes under the environment and culture sector
- creating work opportunities in public social programmes under the social sector,

The EPWP also provides training and enterprise development support at a sub-programme level (Expanded Public Works Programme South Africa 2013).

4. Community-led Local Development (CLLD): European Maritime and Fisheries Fund (EMFF)

Introduction

Community-led local development (CLLD) is a term used by the European Commission to describe a contrary approach to the traditional "top down" development policy. Under CLLD, local players form a partnership that designs and implements an integrated development strategy which builds on the community's social, environmental and economic strengths or "assets". During the last 20 years of EU funding for this type of projects, around 2600 partnerships (both in rural areas and in fisheries-dependent areas) have been developed. Projects receive long-term funding from European Funds, including the European Maritime Fisheries Fund (EMFF) and decide independently where the money is invested. CLLD can be used within the EMFF but also in the other European Structural and Investment Funds, providing a major opportunity for extending the CLLD approach to urban areas (European Commission 2018a).

Elevator Function

The European Commission recognises local development as a long term process which normally lasts several funding periods. Therefore, it recommends an equally long-term financial commitment to build community capacity and assets. Hence, local partnerships are not seen as one-off projects which are simply disbanded at the end of a funding period. Additionally, the Commission considers that local budgets for CLLD need to have a certain "critical mass" in order to make a difference. Beyond that, if Member States devote an entire priority axis or union priority to CLLD within their programmes, the EU co-financing rate can be increased, meaning that Member States have to contribute less national funding compared to standard support (European Structural and Investment Funds 2018). The programme allows for major investments in animation and capacity building. Quick direct payments, as well as calls and criteria designed at local level, ensure great flexibility and effectiveness within the funding process (European Network for Rural Development 2018).

Overall, CLLD still is the only EU wide programme where local people are in the driving seat through local management and financing. The applied methodology focuses on specific sub-regional areas, and is community-led by local action groups composed of representatives of local public and private socio-economic interests. It is carried out through integrated and multi-sectoral area-based local development strategies, and takes local needs and potential into consideration. Thus, the approach allows for connected and integrated use of the Funds to deliver local development strategies (European Commission 2014).

Room for Improvement and Challenges

Challenges have been identified particularly due to the complex institutional playing field the programme works in: The differences in competencies demand for vertical linkages with city authorities as well as horizontal ones to other stakeholders. Furthermore, the presence of powerful interest groups and significant conflicts of interest often hinder programme implementation when it comes to matching the spatial scale of neighbourhoods, small cities, etc. Moreover, there is a continued disintegration between funds and departments at all levels (European Network for Rural Development 2018).

Furthermore, it is worth noting that political stability is crucial for this approach to work effectively in the long-run. Whereas the structure of the EU can ensure a high level of long term stability, this might be something to take into account when applying this logic to a potentially less stable developing country context.

Potential for Adaptation Finance

CLLD is a financially attractive tool for carrying out local development and the scope of CLLD has been broadened to allow local strategies to focus on challenges like social inclusion, climate change adaptation, urban deprivation etc. (European Structural and Investment Funds 2018). Accordingly, CLLD could be used as a tool for bottom-up actions contributing to integrated urban development to tackle not only economic, environmental, demographic and social challenges, but also within the climate change adaptation sector. For instance in Hungary, the National Rural Network has produced a CLLD Planning Map, which provides a template to help local partnerships to tackle themes as diverse as climate change and poverty in a single local development strategy (European Structural and Investment Funds 2018).

By exploring local and community-based responses to climate change, the tool encourages local communities to develop integrated bottom-up approaches, build community capacity, and stimulate innovation. Involving people in the coproduction of development policy promotes community ownership and increases the effectiveness by providing a route for local communities to fully take part in shaping the implementation of objectives in all areas (European Commission 2014).

Example

Fisheries Areas Network (FARNET) (2007 - 2013)

Over the last few years CLLD has shown to have great potential to explore innovative solutions addressing the challenges faced by local communities dependent on fishing. The 307 current fisheries partnerships have been supported by a network called FARNET. FARNET is the community of people implementing CLLD under the EMFF. This network brings together Fisheries Local Action Groups (FLAGs), managing authorities, citizens, and experts from across the EU to work on the sustainable development of fisheries and coastal areas. CLLD

under the EMFF brings additional and innovative opportunities that enable local communities to scale up the effects of the 10,000+ projects supported between 2007 and 2014. In particular, local communities have the possibility to combine funds allocated under the EMFF with those from other European Structural and Investment Funds: the European Social Fund (ESF), the European Regional Development Fund (ERDF) and the European Agricultural Fund for Rural Development (EAFRD).

5. Frontier Funds

The term "Frontier Funds" was developed by IIED and refers to local community-led funds, which provide a way of decentralising development finance and thereby augment the established architecture of aid.

Introduction

Frontier funds, as for example so-called community-led funds, provide an alternative approach to highly centralised development finance by directly targeting a country's local population: Organised groups of the urban poor have designed a finance system based around local saving schemes. These saving schemes come together to pool funds at the district, city, and national scale. Hence, instead of taking the long and winding way through recipient governments and various intermediaries, finance flows to funds that low-income communities can directly access and influence. This way, communities can shape how priorities are set and money is spent (IIED 2015).

Elevator Function

As the traditional development finance system often faces challenges in reaching the local level, the developed bottom-up alternative based upon local savings schemes helps capitalise city-scale funds that invest in projects which reflect the needs of municipalities, city governments and rural districts (IIED 2015).

Overall, decentralised finance through community-led funds significantly contributes to empowering communities, reducing the costs of interventions, leveraging additional finance from multiple sources, and supporting partnerships between local governments and saving groups. Local communities develop a sense of ownership as they can take part in planning processes and because investments come from their own community savings groups. The fact that funds are locally managed and owned enables local groups to identify low-cost ways of making investments (IIED 2015).

Furthermore, local funds have established international networks such as the Urban Poor Fund International (UPFI)⁹ and the Asian Coalition for Community Action (ACCA)¹⁰ which manage the money and ensure that smaller sums are accessible to local actors.

- 9 Shack/Slum Dwellers International (SDI) created the international fund as a subsidiary to help the alliance scale-up its work in Africa, Asia and Latin America. The fund provides capital to member national urban poor funds which, in turn, blend community level savings with funding from nongovernmental organisations (Urban Poor Fund International 2013.
- 10 ACCA, which started in October 2008, is a three-year program set out to transform development options for Asia's urban poor by catalysing and supporting community initiatives. The program's activities build on established, successful models of people-led community development and are helping scale them up by repeated replication (Asian Coalition for Housing Rights 2013.

Through these networks, local initiatives can be linked to major international donors which further mainstream decentralised finance and facilitate the distribution of international money to local communities (IIED 2015).

Room for Improvement and Challenges

If the fund grows out of a social movement, this generally creates strong trust between the fund and the communities that benefit from it. At the same time, this background might present challenges in terms of professionalising the internal system and being able to speak the technical language of donors. Furthermore, the stringent and therefore costly reporting and finance requirements of some funders constitute an administrative burden. Transaction costs for technical support and administration absorb a significant part of the funds' resources (IIED 2018a).

Overall, big donors often refrain from supporting flexible and holistic approaches at community level even though these are enabling poor people's access to resources. Funds need to prove their efficiency though clear governance structures, as well as strategic frameworks and reports (IIED 2018a).

Potential for Adaptation Finance

Frontier funds have the potential to improve local governments' readiness to access and disburse national and global climate adaptation finance. In regions with a high level of climate variability, communities have often developed adaptation strategies, which are uniquely suited to their environment. The instrument can support community-prioritised investments to increase climate resilience based on local development needs and innovative solutions. Frontier funds might be particularly successful as their small, quick grants not only catalyse communities into action, but also show local governments that communities can engage in upgrading programmes for climate change adaptation (IIED 2015).

To be successful, frontier funds should comply with the "money where it matters" principle; meaning that they should build trust between community members and city stakeholders and create a shared understanding of risk, aggregate finance at scale, create an enabling environment through the setting of direction and rules, and build long-term capabilities in terms of members' financial management skills (IIED 2018a).

Example

Gungano Urban Poor Fund, Zimbabwe (since 1999)

The Zimbabwe Homeless People's Federation (ZHPF), formed in 1998 as an urban poor federation, created the Gungano Urban Poor Fund to pool community savings and provide accessible finance to urban groups that are excluded from more formal finance (IIED 2015).

By December 2017, the ZHPF has brought together more than 500 urban grassroots collectives of around 30 families each, which lead and manage saving schemes to fund sustainable livelihoods. ZHPF and the Gungano Fund support poverty alleviation through informal settlement upgrading, incremental

improvements to housing, securing and improving access to basic services, and income-generating activities. Originally, adaptation to climate change was not one of the ZHPF's central aims, nonetheless the projects have contributed to adaptation and increased resilience (IIED 2018a).

The fund operates on a revolving basis as beneficiaries are expected to repay their loans within a specific period at an agreed and affordable interest rate, so that others can benefit from the fund. Meanwhile, loan groups act as guarantors, based on collective savings (IIED 2018a).

6. Cash Grant Distribution via Social Funds

Introduction

Cash grants have become a popular and successful means of assisting people to meet their essential food needs and rebuild their livelihoods. The use of cash grants empowers beneficiaries to purchase locally according to their personal needs, promoting self-directed recovery and stimulating the local economy. Apart from individual cash grants, cash has also been provided to communities in the form of one-off grants or via social funds (International Recovery Platform Secretariat 2010). Social funds are one of the main instruments by which the World Bank engages with and delivers assistance to communities in developing countries (World Bank 2008).

Elevator Function

Social funds are government agencies or programmes that channel grants to communities for small-scale development projects; the cash grant distribution serves to build both physical and social capital. They are typically used to finance a mixture of socio-economic infrastructure (e.g. building or rehabilitating schools, water supply systems, roads), productive investments (e.g. micro-finance and income-generating projects), social services (e.g. supporting nutrition campaigns, literacy programmes, youth training, support to the elderly and disabled), and capacity-building programmes (e.g. training for community-based organisations, non-governmental organisations, and local governments) (World Bank 2008).

Local committees or CBOs administrate the funds, identify how they should be invested, and manage the chosen project. Community-based grants may also be targeted to specific populations who may have less access to disaster assistance such as women, or people living in extreme poverty. In such cases, the grant may also serve to build self-confidence and local leadership capacity. By giving the affected communities the opportunity to identify their needs and to design and implement potential solutions, the initiative benefits from local knowledge with regard to available assets, local market opportunities, and viable livelihood strategies (International Recovery Platform Secretariat 2010).

Room for Improvement and Challenges

Even though evaluations indicate that when cash grants have been given to purchase, repair, or rebuild productive assets, most of the money is spent as intended, exceptions have occurred when assistance providers could not effectively target the grants. Another reported issue came with the poor coordination between too many assistance providers which meant that some households received multiple grants simultaneously. Among other things, this was due to the difficult monitoring of cash usage: Only with careful targeting and a strong monitoring and evaluation plan, cash grants can be directly linked to asset recovery. Another challenging factor is that women and children may benefit less, when cash is distributed to men. Recognising this risk, many cash grant programs now insist on distributing the cash grant directly to the beneficiary and cooperate through local NGOs and civil society groups who are familiar with the intended population (International Recovery Platform Secretariat 2010).

Potential for Adaptation Finance

The World Bank's study on social funds in form of a cross-country analysis concludes that the evaluated funds were effective at reaching the poor and extremely poor communities and households. Allegedly limited capabilities of poor communities to manage funds and execute sub-projects were not perceived as hindering conditions (World Bank 2004).

Thus, social funds possess a number of characteristics that lend themselves well to be applied in the adaptation sector. First, they are already established and work in countries at both the local and national levels, including having a presence in poor and often difficult-to-reach communities across a country. As they operate at national and local levels, they are well positioned to facilitate coordination and cohesiveness. Furthermore, it is possible to involve several partners, including government agencies, donors, NGOs, and the private sector. Social funds are primarily engaged in community-level construction and civil works programmes, which are two of the target areas for local adaptation finance (World Bank 2008).

Example

Malawi Social Action Fund (since 1996;

currently Phase IV)

Beyond improving poverty-related conditions, many of the African social funds have adopted objectives related to creating stronger local communities through promoting community self-help and cohesion or other forms of community capacity building (World Bank 2016b).

The Third Malawi Social Action Fund (MASAF III) offered an approach to poverty alleviation that also supported the decentralisation agenda by ensuring that citizens at the grassroots level have a voice in the planning and implementation of local development initiatives. The project development objective was to improve the livelihoods of poor households within the framework of improved local governance at community, local authority, and national levels (World Bank 2016a).

The project had three components: (i) a community livelihood support fund (CLSF) to finance small labour-intensive community-level public works schemes; (ii) a local authority capacity enhancement fund for building the capacity of local authorities to manage grant money and support community participation in district planning and implementation of community sub-projects; and (iii) a national institutional strengthening fund to finance a technical support team for project implementation (World Bank 2016a).

The Public Works Program under the MASAF IV, which was completed in 2018, supported 450,000 beneficiaries in 35 Councils and had two objectives, (i) creating employment opportunities for income transfer and in the process (ii) build economic infrastructure

through labour intensive activities such as natural resource management through afforestation, soil and water conservation and rainwater harvesting. To an extent the programme was able to fulfil its safety net objective of providing transfers to poor and vulnerable households. However, it faced a number of challenges due to design flaws, low compliance to sector technical norms and standards, limited technical capacity of extension workers, limited monitoring and supervision by council officials, and a lack of community ownership over the assets created. The current version of the MASAF IV Public Works Program has now introduced an Enhanced Public Works Pilot, designed to trial refinements that have been developed based on the reviews of the former programme. Key new features of the pilot include:

- Intensive capacity building at the implementation level (districts, extension staff and project participants/beneficiaries)
- Use of electronic tools for targeting and monitoring and payment (pilot within pilot)
- Increased financial allocation/support to local level stakeholders (extension workers and community committees)
- Continuous working cycle (8 months) by the beneficiaries
- Creation of sizeable manageable catchments/focus hot spots

The idea is that the lessons generated from the Enhanced Public Works Pilot will feed into the designing of the follow-on project for the MASAF IV.

7. Challenge Funds

Introduction

Challenge funds are particularly prominent in the landscape of international cooperation and development and are currently best known as a means to reduce poverty through private enterprises. However, they can also serve as an aid modality to fund the activities of civil society, non-profit organisations, as well as academic research (O'Riordan et al. 2013).

As a funding instrument, a challenge fund distributes grants (or concessional finance) to profit-seeking projects on a competitive basis in a predefined field. Competitions can work via rolling application processes or

specific time-bound investment windows and funding decisions are often taken by a committee of different stakeholders. A challenge fund subsidises private investment in developing countries where there is an expectation of commercial viability accompanied by measurable social and/or environmental outcomes. By this means, challenge funds can leverage public financing and Official Development Assistance (ODA) to achieve better developmental outcomes, while influencing market behaviours through demonstration and imitation effects (UNDP 2017a).

Elevator Function

Challenge funds can have different thematic investment windows with specific criteria that help direct funds straight to where need and potential impact are highest. The funding decisions do not have to follow the "picking winners" strategy but can also focus on enterprises with highest potential or need to maximise impact (UNDP 2017a). Challenge funds operate through calls for proposals which define templates, eligibility criteria and the selection process. If criteria are well designed it can be ensured that funding is specifically targeted at local entities or at projects that provide clear needs assessments or proof of community involvement in project design.

As the funds can focus on a very specific sub-sector or theme, they are able to spur innovation to fight poverty and environmental degradation (ODI 2013). Nearly all challenge funds invite applicants to be innovative rather than risk averse in project design. While rarely explicitly stated, some willingness on the part of the donor to share the risks of project failure is implicit in the practical limits to how far it is likely to go in seeking to recover funds from projects that fail (O'Riordan et al. 2013). This way, challenge funds reflect a tacit understanding that the outcomes of development activities are often unavoidably uncertain and encourage bidders to develop ideas that provide local solutions to local problems.

Room for Improvement and Challenges

Competition elements in challenge funds create a risk that stronger communities are chosen over weaker ones that lack the capacity to submit compelling applications. Therefore, there is a chance that those projects and communities that need the greatest support are disadvantaged by the competitive nature of the selection process. Also, running sufficiently decentralised competitions and administering these challenge funds creates a significant administrative burden for the financier.

Critics further argue that the instrument of challenge funds lacks an incentive to foster sustainable development, as it might generate expectations from the private sector about public support. The innovation-oriented structure of the funds might further lead to decisions which give priority to innovative projects over less ground-breaking projects with greater potential impact (UNDP 2017a). Moreover, the general appreciation of uncertainty and the importance of risk sharing causes a potential moral hazard problem that grantees may forego taking sensible measures to mitigate the risk of project failure in the knowledge that these are less likely to be punished (O'Riordan et al. 2013).

Potential for Adaptation Finance

Challenge funds are already used in the field of climate change mitigation: For instance, the Scottish Government's Climate Challenge Fund provides grants and support for community-led organisations to tackle climate change by running projects that reduce local carbon emissions (Keep Scotland Beautiful 2018). As the funds can focus on specific sub-sectors, they can be applied in a similar way to support projects that develop local solutions to the impacts of climate change. Through the application of specific criteria and thematic investment windows, funds can be directed straight to where need and potential impact are highest and, thereby, increase communities' resilience.

Examples

Africa Enterprise Challenge Fund (AECF) (since 2007)

The Africa Enterprise Challenge Fund (AECF) is an example of an Africa-based Enterprise Challenge Fund with a fund size totalling GBP 130.6 million, resourced by multiple donors. It works with the private sector on a risk sharing basis across 23 African countries to support private sector businesses with interest free loans and grants intended to innovative, commercially viable, high impact commercial activities. The funded projects focus on agriculture, agribusiness, and renewable energy with the aim of improving household incomes and reducing rural poverty.

Malawi Innovation Challenge Fund (since 2014)

The Malawi Innovation Challenge Fund (MICF), supported by UNDP and UK Aid Direct, is a USD 8 million competitive, transparent instrument that provides grant finance for innovative projects proposed by private sector firms active in Malawi's agriculture and manufacturing sectors.

The main aims of the MICF are

To harness the strengths of the private sector to generate and test new ideas

- Trigger innovation, speed up the implementation of new business models or technologies, and combine potential commercial viability with high social impacts
- Help prove the viability of new business models, and enhance the ability of these models to be replicated and scaled up on a purely commercial basis

The fund is designed to be a quick, responsive instrument that is not overly bureaucratic and understands the needs of the private sector (Imani Development 2018).

Nordic Development Fund (since 2009)

The Nordic Development Fund, a joint Nordic development financing institution that supports climate-related projects in Africa, Asia and Latin America, has initiated the Nordic Climate Facility (NCF) in 2009. NCF is a challenge fund set up to finance early stage climate change projects in developing countries.

NCF aims to build a portfolio of innovative business concepts which have been tested, proved viable and are ready to be scaled-up and replicated. The average size of an NCF project has been around EUR 690,000, with an average of almost EUR 300,000 in co-financing from project partners and other financiers (NCF 2018).

8. Decentralised Financing Policies

Introduction

Decentralisation is usually understood as the assignment of public functions to sub-national governments along with supporting structures, systems, and resources. It is especially valued for its posited potential to enhance public sector efficacy (Smoke 2015). Many countries have established decentralised functions, typically with intentions to improve service delivery, enhance governance and accountability, increase equity in service and development outcomes, and/or promote a more stable state (Local Development International 2013).

Financial responsibility is a core component of decentralisation, meaning that local governments and private organisations require an adequate level of revenues — either raised locally or transferred from the central government — as well as the authority to make decisions about expenditures (World Bank Group 2001).

The urban transport sector provides an illustrative example: Sustainable urban transport systems are needed in developing and emerging economies worldwide. Hence, a variety of financing and planning practices are developed to identify suitable elements for respective local contexts. In countries characterised by Decentralised Financing Policies (DFP), full responsibility for planning transport systems lies with local governments while the central government's role is limited to the setting of standards for the operation, technical assistance, and above all, project funding through earmarked funds for urban transport (GIZ 2013).

Elevator Function

Fiscal decentralisation that allocates financial resources to local entities can generally take different forms, including

- self-financing or cost recovery through user charges as a necessary condition for people to use a certain facility;
- co-financing or co-production arrangements through which the users of a certain facility / beneficiaries participate in providing services and infrastructure through monetary or labour contributions;
- expansion of local revenues through property or sales taxes, or indirect charges;
- intergovernmental transfers that shift general revenues from taxes collected by the central government to local governments for general or specific uses;
- authorisation of municipal borrowing and the mobilisation of either national or local government resources through loan guarantees (World Bank Group 2001)

Apart from the allocation of financial assets, fiscal decentralisation can improve the efficiency of public service delivery through preference matching. As local governments possess better access to local preferences, they have an informational advantage over the central government in deciding which provision of goods and services would best satisfy citizens' needs (OECD 2018).

Moreover, fiscal decentralisation can foster stronger accountability: The geographical closeness of public institutions to the local population, as final beneficiaries, enhances accountability and can improve public service outcomes (OECD 2018).

Room for Improvement and Challenges

Fiscal decentralisation relies heavily on the existence of well-trained local professional teams, as technical capacity is a key element for the proper functioning of the system. Some analysts argue that decentralisation may worsen outcomes if local governments have inadequate capacity or face weak incentives to meet their obligations (Local Development International 2013). Hence, the model is mostly adopted in developed countries endowed with autonomous local governments that operate with highly qualified consolidated technical teams. Cities or regions with fewer technical and economic resources would need additional funding and assistance through national centralised programmes. However, the coexistence of both models within one country is possible, just like the transformation from one model to the other as local experience and technical capacity increase over time (GIZ 2013).

Coordination of key actors involved in the projects to be financed is one of the main challenges (Local Development International 2013). There is need for strong metropolitan planning agencies that are able to handle different local interests. However, in developing countries this is often not the case, so that for example the implementation of transport projects is usually hindered by the lack of coordination mechanisms at the metropolitan level. Moreover, institutional scattering combined with many levels of bureaucracy slow down the implementation of projects and the lack of a clear and simple structure for planning often translates into delays and excessive administrative procedures (GIZ 2013).

Moreover, fiscal decentralisation can actually worsen public service delivery if efficiency depends on economies of scale. Devolution of public service delivery to a small-scale local government, say a municipality with a small number of government officials (producers and providers) and a small population (beneficiaries), can increase costs if economies of scale are important in

the process of production and provision of some specific public goods (OECD 2018).

Potential for Adaptation Finance

An adequate institutional environment is needed for decentralisation to improve adaptation finance. Such conditions include effective autonomy of local governments, strong accountability at various levels of institutions, good governance, and strong capacity at the local level (OECD 2018). If these requirements are met, financial assets can be effectively allocated to local entities.

Through decentralisation, considerable parts of the project cycle are delegated to communities and local governments. This makes a community-driven approach, a prerequisite for successful local adaptation, more feasible as local actors and institutions can be directly involved in decisions on the allocation of funds (World Bank Group 2001). Through preference matching based on local needs, the efficiency of public service delivery for adaptation will ultimately improve. Furthermore, stronger local accountability through geographical closeness of responsible public institutions can lead to pressure on local authorities to continuously search for ways to produce and deliver better public services (OECD 2018).

Adaptation can take different forms depending on the action taken in response to the external threat. In this regard, decentralised financing policies are usually more flexible in the allocation of financial resources than centralised programmes. Depending on the type of adaptation measures, it is possible that national centralised programmes are adopted to provide funding and assistance only to those regions with fewer technical and economic resources. Simultaneously, the country can adopt a flexible decentralised model to entrust the more experienced and technical equipped communities with the necessary responsibility and accountability in the management of financial resources (GIZ 2013).

Example

Sustainable Urban Transport

Projects under DFPs reflect distinct local (city and regional) priorities rather than national objectives. Consequently, the planning of Sustainable Urban Transport lies in the hands of local or state level/provincial governmental institutions: They identify the needs, evaluate the different available options, perform tech-

nical projects, set performance targets and negotiate service contracts with public transport operators and decide on the allocation of financial resources (GIZ 2013).

With regard to financing, most of the systems highly depend on funding provided by the central government through the transfer of earmarked funds whose specific usage is decided by the second and third levels of government according to their priorities. This allows for both a greater coverage of cities to benefit from national resources and for project diversification in order to meet the specific local requirements. Moreover, the decentralised model usually facilitates

the diversification of financing schemes by promoting the sourcing of local funds. In addition, required local funding is often generated through parking fees, local gas taxes, congestion charging schemes, etc. that can be considered part of a transport demand management strategy (GIZ 2013).

9. Crowdfunding

Introduction

Crowdfunding is based on collectively pooling individual resources in support of initiatives promoted by other people or organisations through a dedicated online platform and has grown from USD 1 billion in 2011 to USD 34 billion in 2015 (UNDP 2017b). Over the years, different approaches to crowdfunding have emerged and the crowdfunding platforms have multiplied. Generally, four different models of crowdfunding with their respective advantages, risks and drawbacks are distinguished: donations-, rewards-, lending-, and equity-based.

Elevator Function

Applied to climate adaptation finance, crowdfunding bears great potential. It comes with less bureaucracy and more connectivity, can enhance direct information flows and foster transparency. Social media and Internet based platforms can contribute to overcoming geographic barriers and help remote areas access financial resources. Crowdfunding requires little to no intermediation and can contribute to better tailoring available financial support for adaptation purposes to local needs. It can also be a means for community involvement, thus leading to higher social acceptance and appropriate responses for addressing local challenges. As a connecting tool between project initiators and investors or financial support mechanisms such as the AF or GCF, crowdfunding can accelerate adaptation efforts and offer small-scale solutions. Matching crowdfunding with other institutions and support programmes such as the World Bank Climate Innovation Centres could trigger additional benefits (World Bank 2013).

Room for Improvement and Challenges

Despite its great potential and exponential growth, crowdfunding can pose a challenge to the relevant stakeholders. In stark contrast to established agencies and organisations, only few initiators of crowdfunding projects are experienced project managers and dispose of the necessary skills to realise the initiated project. For crowdfunding instruments to thrive, it is essential that social media market penetration is strong and internet usage habits developed (World Bank 2013). Also, legislation in place on crowdfunding may vary from country to country and (equity) crowdfunding rules are only gradually being introduced (Allied Crowds 2016). However, creating a clear regulatory framework can significantly contribute to a favourable environment for well-functioning crowdfunding projects.

Potential for Adaptation Finance

Although a rather recent phenomenon, crowdfunding has contributed to financing climate initiatives ranging from solar lighting kits to energy efficient cooking stoves. In the absence of a crowdfunding platform exclusively dedicated to adaptation projects, multiple crowdfunding platforms have merely introduced climate-related categories labelled as "green" or "green projects". However, this constitutes a great potential for adaptation finance and first attempts to close this gap have been made. As the example of the Belgian city Ghent shows (see example in Box) some adaptation projects have successfully been financed through crowdfunding. In Ecuador, a crowdfunding platform has been launched with support of the GEF Small Grants Programme. With regards to the GCF, the creation of a Crowdfunding for Climate Change Window could be a first step in harnessing the benefits of this disruptive finance scheme for adaptation purposes. As such, the GCF could set up a Crowdfunding for Climate Change Portal giving access to different crowdfunding platforms and offering a range of climate-relevant products. It could introduce a mechanism of evaluation and accreditation, thus adding credibility to the platforms or contribute to reducing investment and lender risks through a "de-risking" instrument that crowdfunding platforms could apply to (European Capacity Building Initiative 2013).

Examples

Ghent Crowdfunding Platform – Realising Climate Change Adaptation (since 2015)

Launched in 2015, the platform 'crowdfunding.ghent' offers its citizens the opportunity to submit a proposal for small scale initiatives with a societal benefit and raise the necessary funds to realise them. Submitted projects are reviewed by the city's platform manager before being published and open to donations by supporters of the community. Project initiators can additionally apply for a municipal subsidy of the project that is allocated upon the condition that the pre-defined amount of funding is raised and the project accepted by an independent jury.

So far, two different projects addressing climate adaptation have been implemented with support of the platform, one focusing on urban farming and sustainable food production and the other on enhancing green areas. Besides contributing to the adaptation efforts of the city, the crowdfunding approach has set up a new bottom-up mechanism to stimulate co-creation partnerships between multiple stakeholders, thus fostering community involvement and social acceptance. Geared towards small scale project financing, the crowdfunding approach has proven a successful tool in providing support to initiatives that are less suitable to be financed by existing financial instruments, such as subsidies or tax incentives (European Climate Adaptation Platform 2016).

GreenCrowds – first socio-environmental crowdfunding platform of Ecuador (since 2015)

Since 2015, GreenCrowds is the Ecuador's first socio-environmental crowdfunding platform to support "rural grass-roots projects that protect the environment and strengthen local cultural identities" (UNDP 2016). The crowdfunding platform is supported by the GEF SGP and implemented by UNDP; so far, GreenCrowds collected over USD 10,900 in 2015 and USD 12,800 in 2016 (GreenCrowds 2018).

However, outside Quito, GreenCrowds' reach and presence remain scarce; its growth rate is relatively low (reach, donations, volume, projects) with its business model being rather non-dynamic and leaning on UNDP structures. Moreover, GreenCrowds has been criticised by community actors for the low quality of trainings provided and the demanded advance investments that may be hard to achieve for some projects. There is still room for improvement to reach a more dynamic and impactful approach with a much larger community reach and acceptance.

10. Bonds

Introduction

Bonds are debt instruments through which public or private entities can borrow capital directly from investors rather than from a bank. At the local level, sub-sovereign bonds have been an important instrument especially for financing municipal projects in many industrialised countries but also in a number of emerging economies (e.g. Mexico, India, South Africa) (UNDESA 2009). In recent years, the concept of green bonds has increasingly shifted attention of issuers and investors towards more sustainable investments. A green bond requires that all proceeds of the bond are spent on projects that contribute to protecting the climate and environment.

Elevator Function

As a general rule, bonds allow different types of actors (e.g. municipalities and local companies) to directly access capital markets, given that they fulfil certain requirements, e.g. with regard to their creditworthiness, and that framework conditions allow them to take up debt through bonds. In the past, municipal bonds often came with lower interest rates than bank loans and also benefitted from other incentives (e.g. tax exemption in the USA), making them an attractive instrument for financing municipal projects. Green bonds could increase this elevator function since demand for such bonds currently exceeds supply in many countries, causing investors to actively seek investment opportunities.

Room for Improvement and Challenges

For local entities, issuing a bond can be more complex than obtaining a loan, e.g. because of legal requirements and because of the need to conduct roadshows to attract investors. Moreover, many public entities are not allowed by law to take up debt (including through bonds). At the same time, bonds often have to a have a minimum value which may exceed the financing requirements of the entity looking for funding. In the field of green bonds, the lack of a clear definition around what counts as adaptation constitutes a problem as, so far, there are no agreed means of demonstrating when a city, infrastructure or coast has successfully adapted to climate change.

Potential for Adaptation Finance

Especially green bonds could be used to finance projects that increase resilience to extreme events caused by climate change. Typically, large parts of responsibility for adaptation fall on local governments. Thus, issuing municipal bonds through a competitive tendering procedure under certain adaptation criteria can provide a way to invest in community-focused development. The instrument ensures that financial means are directed to the most promising programmes and

business models which promote sustainable adaptation processes at the local level. Issuing climate adaptation bonds through a competitive tendering process is generally advisable as the sector covers a wide variety of investor profiles (few investors are interested in bonds which are only climate-related) and requires transparency.

So far, however, green bonds have mainly been used to fund low-carbon energy projects. Although the Green Bond Principles and the Climate Bonds Standard, two widely used voluntary guidelines for green bonds, consider climate change adaptation as eligible for financing through green bonds, only a small proportion of issuances have been tied to an adaptation-related project, all in the water sector (Climate Bonds Initiative 2017).

Similar to loans, bonds rely on the capacity of the issuer to pay back the volume of the bond with interest to the investor. As such, this would imply a clearly improved flow of revenues for the issuer. However, as bonds are a more long-term financial instrument, they could also be linked to the anticipated economic resilience in the mid-term future which will preserve a continuous cash flow and thus allow repayment.

Example

Climate bond financing adaptation measures in Paris

(since 2015) The Paris Cl

The Paris Climate Bond was issued in November 2015 to finance projects in climate mitigation and adaptation. The total size of the bond is EUR 300 million, with a running time until May 2031. The bond targets private investors who consider it a secondary advantage to invest in the sustainability of the city of Paris. Annual reporting ensures transparency, whereby the issuer has to justify the allocation of money to projects complying with the set criteria. Vigeo, a non-financial rating agency, reviews the process and provides investors with reassurance on the use of their funds (European Environment Agency 2017).

In a competitive tendering, the City of Paris selected two banks to accompany it in the process as partners. The City of Paris benefited from their expertise in investor expectations and from their network and marketing services. The selection process consists of two steps which are taken in accordance with criteria partly brought forward by the Finance Management Support Service of the city and partly from standards used for socially responsible investments (European Environment Agency 2017).

ANNEX II

RESEARCH METHODOLOGY AND APPROACH

The research approach for this scoping paper is a combination of desk research and expert interviews. As a starting point, eight brief expert interviews had been conducted during the Community Based Adaptation Conference 2018 (CBA12) in Lilongwe with representatives from the governments of Uganda, Malawi, and Zambia as well as from the African Development Bank (AfDB), United Nations Development Programme (UNDP), United Nations Framework Convention on Climate Change (UNFCCC), and the South Africa Adaptation Network (see Annex III for full list of interviewees). These interviews primarily focused on understanding how processes of channelling money down to the local level currently work in developing countries, what bottlenecks there are, and what initial ideas for overcoming existing challenges could be. Through the participation in an event of the IIED and a hackathon in London on "Breaking barriers to local climate finance for the triple win", additional research insights on local access to climate finance could be gathered; moreover, challenges and initial ideas for potential solutions were discussed. Finally, further insights on specific existing financing instruments and their respective elevator functions were gathered in interviews during the 6th Asia Pacific Climate Change Adaptation Forum (APAN Forum) in Manila.

Building on that, comprehensive desk research makes up the larger part of this paper. The basis for the analysis is a screening of various financial instruments, funds, and financing tools with regard to their respective elevator functions. The paper makes a distinction between instruments that already exist in the adaptation finance world and those that are being used in other sectors (see TABLE 1 above). The underlying elevator functions of such instruments could also be relevant for adaptation finance.

The **criteria for selecting the tools** for the screening in this paper are:

- 1. Does the tool have a dedicated elevator function?
- 2. Is it being used in adaptation finance or does it have the potential to be used in that space?
- 3. Can the tool be used for international funding sources?
- 4. Is the tool applicable for a developing country context?
- 5. Can the local level (as defined above) be reached?

In correspondence with each instrument, project examples have been selected that exemplify the work of the respective instrument and elevator function. They demonstrate a practical application of the identified operating principles and include a wide geographical variance. However, the selection of the project examples does not necessarily imply a quality assessment of their respective implementation. Instead, the purpose is to present project designs that illustrate the potential for the underlying elevator function to be applied in the field of adaptation finance and within developing or emerging countries, without evaluating their respective practical enforcement.

For looking at the different elevator functions, we mostly choose the lens of an international donor government and development bank perspective. This angle is necessary to provide the key target group of this analysis with recommendations on how they can improve processes to make international finance streams reach the local level.

ANNEX III

LIST OF INTERVIEWEES

TABLE 5

List of Interviewees

Interviewee	Position	Entity	Country
Desanker, Paul	Manager of the Adaptation Programme	UNFCCC	Germany
Edoo, Rissa	National Coordinator GEF Small Grants Programme	UNDP	Trinidad and Tobago
Epitu, Joseph	Management of Training Programs	Ministry of Water and Environment	Uganda
Kenson Sakala, Joseph	Executive Director	Youth For Environment and Sustainable Development (YSD)	Malawi
Mae Gutierrez, Bianca	Advisor	GIZ Support CCC II	Philippines
Mambwe, Hope	Natural Resources Management Officer	Ministry of Lands and Natural Resources	Zambia
Mankhwazi, Tryness	Environmental Affairs Department	Ministry of Environment and Climate Change Management	Malawi
Mwenechanya, Jarvis	Environmental District Officer, Environmental Affairs Department	Ministry of Environment and Climate Change Management	Malawi
Paudel, Basanta	Independent consultant on adaptation		Nepal
Phillips, Gareth	Chief Climate Change and Green Officer	African Development Bank	Cote d'Ivoire
Spezowka, Andrew	Portfolio Manager Resilience and Sustainable Growth	UNDP	Malawi

BIBLIOGRAPHY

Adaptation Fund 2017a: Direct Access to Climate Finance Builds Capacity and Credibility of National Institutions. Retrieved 27 Nov 2018, from https://www.adaptation-fund.org/direct-access-climate-finance-builds-capacity-credibility-national-institutions/.

Adaptation Fund 2017b: OPG ANNEX 1: Strategic Priorities, Policies and Guidelines: Adaptation Fund.

Adaptation Fund 2018a: National Implementing Entities. Retrieved 27 Nov 2018, from https://www.adaptation-fund.org/apply-funding/implementing-entities/national-implementing-entity/.

Adaptation Fund 2018b: Regional Implementing Entities. Retrieved 27 Nov 2018, from https://www.adaptation-fund.org/apply-funding/implementing-entities/regional-implementing-entities/.

African Development Bank 2018: Pilot Program for Climate Resilience (PPCR). Retrieved 27 Nov 2018, from https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/climate-investment-funds-cif/strategic-climate-fund/pilot-program-for-climate-resilience-ppcr/.

African Development Bank Group 2018: Forest Investment Program (FIP). Retrieved 27 Nov 2018, from https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/climate-investment-funds-cif/strategic-climate-fund/forest-investment-program-fip/.

Allied Crowds 2016: Developing World Crowdfunding. Prosperity through Crowdfunding. Annual Report, January 2016.

Ampaire, Edidah L.; Laurence Jassognea; Happy Providence; Mariola Acosta; Jennifer Twyman; Leigh Winowiecki and Piet van Asten 2017: Institutional challenges to climate change adaptation. A case study on policy action gaps in Uganda. In: Environmental Science & Policy, Volume Volume 75, 2017, pp 81–90.

Asian Coalition for Housing Rights 2013: The Asian Coalition for Community Action (ACCA). Retrieved 21 Nov 2018, from http://www.achr.net/activities-acca.php.

Banaguas, Glenn S. March 09, 2017: The essence of accessing the People's Survival Fund. Retrieved 27 Nov 2018, from https://www.manilatimes.net/essence-accessing-peoples-survival-fund/316193/.

Bečvářová, V. 2011: Economic and regional consequences of direct payments under the current cap philosophy. In: Acta univ. agric. et silvic. Mendel. Brun., Volume LIX No. 4, 2011, pp 19–26.

BRACED 2018: DCF: Decentralising climate funds in Mali and Senegal. Retrieved 27 Nov 2018, from http://www.braced.org/about/about-the-projects/project/?id=fadb8fd0 -55a3-4715-8632-c19901bb-da4c.

CCAP 2017: Working Paper: Mobilizing Private Sector Investment in Support of NDCs: Center for clean air policy.

CCRIF 2015: Understanding CCRIF. A Collection of Questions and Answers. Grand Cayman: CCRIF.

Christiansen, Lars; Caroline Schaer; Cecile Larsen and Prakriti Naswa 2016: Monitoring & Evaluation for climate change adaptation. A summary of key challenges and emerging practice. Understanding, discussing and exemplifying the key challenges of M&E for adaptation: UNEP DTU Partnership.

Climate Bonds Initiative 2017: Bonds and Climate Change. The State of the Market 2017.

Climate Investment Funds 2018a: Climate Resilience. Retrieved 27 Nov 2018, from https://www.climateinvestmentfunds.org/topics/climate-resilience.

Climate Investment Funds 2018b: Forest Investment Program. Retrieved 27 Nov 2018, from https://www.climateinvestmentfunds.org/topics/sustainable-forests.

Climate Investment Funds 2018c: Mozambique. Retrieved 27 Nov 2018, from https://www.climateinvestmentfunds.org/country/mozambique.

Climate Policy Initiative 2018: Global Climate Finance. An Updated View 2018: CPI.

CoastAdapt 2016: Financial and funding mechanisms for adaptation to climate change. Retrieved 27 Nov 2018, from https://coastadapt.com.au/resources-adaptation-including-innovative-financing-mechanisms.

Coro, Alfredo Matugas 2018: Del Carmen's PSF Journey. Towards a More Climate-Resilient Philippines: A More Accessible People's Survival Fund. Surigao del Norte: ASEAN.

DGM Global 2018: About the Dedicated Grant Mechanism. Retrieved 27 Nov 2018, from https://www.dgmglobal.org/about-us/.

die 2015: How can Public Works Programmes create Sustainable Employment? Bonn: Deutsches Institut für Entwicklungspolitik.

Easterly, William 2006a: Planners versus Searchers in Foreign Aid. In: Asian Development Review 2006:23, 2, pp 1–35.

Easterly, William 2006b: The White Man's Burden. New York: The Penguin Press.

EBRD 2015: EBRD launches climate resilience credit line: first tranche to Bank Eskhata in Tajikistan. Retrieved 27 Nov 2018, from https://www.ebrd.com/cs/Satellite?c=Content&cid=1395247988831&d=Mobile&pagename=EBRD%2FContent%2FContentLayout.

euobserver 2018: Progressive CAP alternative only hope for sustainability. Retrieved 27 Nov 2018, from https://euobserver.com/opinion/142168.

EURACTIV 2017: EU agricultural policy incoherent and outdated – report. Retrieved 27 Nov 2018, from https://www.euractiv.com/section/agriculture-food/news/eu-agricultural-policy-incoherent-and-outdated-report/.

European Capacity Building Initiative 2013: Crowdfunding for Climate Change. A new source of finance for climate action at the local level?: ecbi.

European Climate Adaptation Platform 2015: Financial tools for risk management. Retrieved 27 Nov 2018, from https://climate-adapt.eea.europa.eu/metadata/adaptation-options/financial-tools-for-risk-management.

European Climate Adaptation Platform 2016: Ghent crowdfunding platform realising climate change adaptation through urban greening. Retrieved 11 Nov 2018, from https://climate-adapt.eea.europa.eu/metadata/case-studies/ghent-crowdfunding-platform-realising-climate-change-adaptation-through-urban-greening.

European Commission 2018a: Direct payments. Retrieved 27 Nov 2018, from https://ec.europa.eu/agriculture/direct-support/direct-payments en.

European Commission 2018b: Direct payments. Retrieved 27 Nov 2018, from https://ec.europa.eu/agriculture/glossary/direct-payments_en_en.

European Commission 2018c: Direct support. Retrieved 27 Nov 2018, from https://ec.europa.eu/agriculture/direct-support_en.

European Commission 2012: The EU agricultural policy delivering on adaptation to climate change: DG for Agriculture and Rural Development.

European Commission 2014: Community-led local development. Cohesion Policy 2014 – 2020: EC.

European Commission 2018a: Community-led local development (CLLD). Retrieved 27 Nov 2018, from https://ec.europa.eu/fisheries/cfp/emff/clld en.

European Commission 2018b: The common agricultural policy at a glance. Retrieved 27 Nov 2018, from https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-glance_en#whydoweneedit.

European Environment Agency 2017: Financing urban adaptation to climate change (EEA Report No 2/2017, Copenhagen: EEA.

European Network for Rural Development 2018: CLLD. Reflections on the past. Lessons for the future: ENRD.

European Structural and Investment Funds 2018: Guidance for Local Actors on Community Led Local Development: European Commission

Expanded Public Works Programme South Africa 2013: EPWP Background Information. Retrieved 27 Nov 2018, from http://www.epwp.gov.za/.

GIIF 2018: Global Index Insurance Facility. Retrieved 27 Nov 2018, from https://www.indexinsuranceforum.org/.

GIZ 2013: Financing Sustainable Urban Transport. International Review of National Urban Transport Policies and Programmes: GIZ, EMBARQ.

GIZ 2015: Climate Risk Insurance. For strengthening climate resilience of poor people in vulnerable countries. A background paper on challenges, ambitions and perspectives. Eschborn: GIZ.

GIZ 2018: Finance options and instruments for Ecosystem-based Adaptation. Overview and compilation of ten examples. Bonn: GIZ.

Global Environment Facility Evaluation Office 2008: Joint Evaluation of the GEF Small Grants Programme. Evaluation Report No. 39. Washington: UNDP.

Global Green Growth Institute 2018: Support to the Operationalization of the People's Survival Fund. Retrieved 21 Nov 2018, from http://gggi.org/project/support-to-the-operationalization-of-the-peoples-survival-fund/.

Global Water Partnership 2018: Climate insurance and water-related disaster risk management. Unlikely partners in promoting development? Stockholm: GWP.

Government of India n.d.: National Agricultural Insurance Scheme (NAIS): Government of India.

Green Climate Fund 2018a: GCF in Brief. Direct Access: GCF.

Green Climate Fund 2018b: Getting accredited. Retrieved 27 Nov 2018, from https://www.greenclimate.fund/how-we-work/getting-accredited/ae-composition.

GreenCrowds 2018: Quienes somos. Retrieved 21 May 2019, from https://greencrowds.org/quienes-somos/.

Hammill, Anne; Richard Matthew and Elissa McCarter 2008: Microfinance and Climate Change Adaptation. In: IDS Bulletin, Volume Volume 39(4), 2008, pp 113–122.

Hermann, Alexandra; Peter Köferl and Jan Philip Mairhöfer 2016: Climate Risk Insurance: New Approaches and Schemes: Allianz.

IIED 2011: Community-based adaptation and microfinance: a win-win partnership? Retrieved 27 Nov 2018, from https://www.iied.org/community-based-adaptation-microfinance-win-win-partnership.

IIED 2015: The architecture of aid. Retrieved 16 Oct 2018, from https://www.iied.org/files/kiln/architecture-of-aid.html.

IIED 2016a: Decentralising climate adaptation funds in Mali. New York: BRACED , IIED .

IIED 2016b: How devolved climate finance can deliver climate resilience at local level. Retrieved 27 Nov 2018, from https://www.iied.org/how-devolved-climate-finance-can-deliver-climate-resilience-local-level.

IIED 2016c: Six steps to local climate finance. Retrieved 27 Nov 2018, from https://www.iied.org/six-steps-local-climate-finance.

IIED 2017: Delivering real change. Getting international climate finance to the local level. London: IIED.

IIED 2018a: Case Studies "Frontier Funds". London: IIED Event: "Breaking barriers to local climate finance for the triple win".

IIED 2018b: Decentralising Climate Funds in Mali and Senegal. Retrieved 27 Nov 2018, from https://www.iied.org/decentralising-climate-funds-mali-senegal.

IIED 2018c: Devolved climate finance approach forges new ways of working between citizens and state. Retrieved 27 Nov 2018, from https://www.iied.org/devolved-climate-finance-approach-forges-new-ways-working-between-citizens-state.

ILO 2007: Evaluation: Creating Jobs: Capacity building for local resource-based road works in selected districts in NAD and Nias. Mid-Term Evaluation Summary.

Imani Development 2018: Malawi Innovation Challenge Fund Portfolio. Retrieved 27 Nov 2018, from https://imanidevelopment.com/malawi-innovation-challenge-fund-portfolio/.

Institute for Climate and Sustainable Cities 2017: Knowledge Exchange on the People's Survival Fund: ICSC.

Institute for Climate Economics 2017: Using credit lines to foster green lending: opportunities and challenges. Paris: I4CE.

International Initiative for Impact Evaluation 2018: Does community-driven development build social cohesion or infrastructure?: 3ie.

International Recovery Platform Secretariat 2010: Guidance Note on Recovery. Livelihood: UNDP; UNISDR; IRP.

Investopedia 2018: Lines of Credit: The Basics. Retrieved 27 Nov 2018, from https://www.investopedia.com/articles/personal-finance/072913/basics-lines-credit.asp.

IPCC 2018: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

IPCC 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: IPCC.

Jamaica National Small Business Loan 2017: About Climate Smart Loan. Retrieved 21 May 2019, from https://www.jnsbl.com/climate-smart-loan/

Kates, Robert W.; William R. Travis and Thomas J. Wilbanks 2012: Transformational adaptation when incremental adaptations to climate change are insufficient. In: Proceedings of the National Academy of Sciences of the United States of America, Volume 19, 2012, pp 7156–7161.

Keep Scotland Beautiful 2018: Climate Challenge Fund. Retrieved 20 Nov 2018, from https://www.keepscotlandbeautiful.org/sustainability-climate-change/climate-challenge-fund/.

Local Development International 2013: The role of decentralisation/ devolution in improving development outcomes at the local level. Review of the Literature and Selected Cases. Brooklyn, New York:

NCF 2018: Nordic Climate Facility Results Report 2017: Nordic Development Fund.

O'Riordan, Anne-Marie; James Copestake; Juliette Seibold and David Smith 2013: Challenge Funds in International Development: Triple Line Consulting Ltd. & University of Bath.

ODI 2008: Natural Resource Perspectives. A typology for Public Works Programming. London: Overseas Development Institute.

ODI 2013: Understanding challenge funds. London: Overseas Development Institute.

ODI 2014: The effectiveness of climate finance. A review of the Pilot Program for Climate Resilience. London: Overseas Development Institute.

OECD 2013: Glossary of statistical terms. Retrieved 27 Nov 2018, from https://stats.oecd.org/glossary/detail.asp?ID=388.

OECD 2014: Environmental Lending in EU Eastern Partnership countries: OECD.

OECD 2015: Toolkit to enhance access to adaptation finance. For developing countries that are vulnerable to adverse effects of climate change, including LIDCs, SIDS and African states: OECD.

OECD 2018: Fiscal Decentralisation and Inclusive Growth: OECD.

Paulais, Thierry and Juliana Pigey 2012: Adaptation and Mitigation: What Financing is Available for Local Government Investments in Developing Countries? (Cities and Climate Change. Responding to an Urgent Agenda, Washington: The World Bank.

People's Survival Fund 2017a: People's Survival Fund Brochure: PSF.

People's Survival Fund 2017b: Proponent's Handbook. A Guide on How to Access the People's Survival Fund: PSF.

PPCR 2018: Microfinance for Climate Resilience and Adaptation: PPCR

Prairie Climate Centre 2017: Building a Climate-Resilient City. Transformational adaptation: IISD.

PROPARCO 2018: Financing Sustainable Energy and Development: Groupe Agence Française de Développement.

Roberts, Debra 2008: Thinking globally, acting locally. Institutionalizing climate change at the local government level in Durban, South Africa. In: ENVIRONMENT & URBANIZATION, Volume Vol 20(2), 2008, pp 521–537.

Self Employed Women's Association 2009: SEWA Bank. Retrieved 27 Nov 2018, from http://www.sewa.org/services_bank.asp.

Smoke, Paul 2015: Decentralisation (SDRC Professional Development Reading Pack, No. 9). Birmingham: GSDRC.

South African National Biodiversity Institute 2018: About SANBI. Retrieved 27 Nov 2018, from https://www.sanbi.org/.

SouthSouthNorth 2018: Small Grants Facility. Retrieved 15 May 2019, from https://southsouthnorth.org/portfolio_page/small-grants-facility/.

Supnet, Danica M. 2017: Accessing the People's Survival Fund. Retrieved 27 Nov 2018, from http://www.bworldonline.com/content.php?section=Opinion&title=accessing-the-people&8217s-survival-fund&id=147300.

The GEF Small Grants Programme 2012a: Mission and History. Retrieved 27 Nov 2018, from https://sgp.undp.org/about-us-157.html.

The GEF Small Grants Programme 2012b: SPA CBA. Retrieved 27 Nov 2018, from https://sgp.undp.org/about-us-157/partnerships/spa-cba.html.

Transparency International 2018a: Climate Adaptation Finance Governance Standards. A new approach piloted in the Maldives and Bangladesh: Transparency International.

Transparency International 2018b: Ensuring that climate funds reach those in need. Retrieved 27 Nov 2018, from https://www.transparency.org/news/feature/ensuring_that_climate_funds_reach_those_in_need.

UNCDF 2014: The Local Climate Adaptive Living Facility (LoCAL). Retrieved 27 Nov 2018, from https://www.local-uncdf.org/.

UNCDF 2016: Stakeholder Presentation on Proposed Initiatives for Subnational Climate Change Adaptation Financing takes place in Cambodia. Retrieved 27 Nov 2018, from https://www.lo-

cal-uncdf.org/news/stakeholder-presentation-on-proposed-initiatives-for-subnational-climate-change-adaptation-financing-takes-place-in-cambodia.

UNCDF 2017: Financing local adaptation to climate change. Experiences with performance-based climate resilience grants. New York: UNCDF.

UNCDF 2018: Mid Term Evaluation Local Climate Adaptive Living Facility: UNCDF.

UNDESA 2009: Infrastructure finance in developing countries — the potential of sub-sovereign bonds. DESA Working Paper No. 76: United Nations Department of Economic and Social Affairs.

UNDP 2016: Spark, Scale, Sustain. UNDP Innovation Facility: UNDP.

UNDP 2017a: Enterprise Challenge Funds. Retrieved 27 Nov 2018, from http://www.undp.org/content/sdfinance/en/home/solutions/enterprise-challenge-fund.html.

UNDP 2017b: Financing Solutions for Sustainable Development. Retrieved 27 Nov 2018, from http://www.undp.org/content/sdfinance/en/home/solutions/template-fiche12.html.

UNDP 2017c: The A to Z of the SGP. A Guide to the GEF Small Grants Programme. New York: UNDP.

UNDP 2018a: Local governments to implement climate adaptation projects with support from the UK and UNDP. Retrieved 20 Nov 2018, from http://www.np.undp.org/content/nepal/en/home/presscenter/pressreleases/2018/local-governments-to-implement-climate-adaptation-projects-with-support-from-the-uk-and-undp.html.

UNDP 2018b: Nepal Climate Change Support Programme (NCCSP). Retrieved 21 Nov 2018, from http://www.np.undp.org/content/nepal/en/home/projects/nccsp.html.

UNEP 2017: Adaptation Gap Report 2017. Towards Global Assessment. Nairobi, Kenya: United Nations Environment Programme.

UNFCCC 2008: Mechanisms to manage financial risks from direct impacts of climate change in developing countries. Technical Paper: UNFCCC.

UNFCCC 2016: Opportunities and options for enhancing adaptation actions and supporting their implementation: reducing vulnerability and mainstreaming adaptation: UNFCCC.

UNFCCC 2018: National Adaptation Programmes of Action. Retrieved 27 Nov 2018, from https://unfccc.int/index.php/topics/resilience/workstreams/national-adaptation-programmes-of-action/introduction.

UNFCCC 2019: Introduction to Gender and Climate Change. Retrieved 20 Mar 2019, from https://unfccc.int/topics/gender/the-big-picture/introduction-to-gender-and-climate-change.

Urban Poor Fund International 2013: About the UPFI. Retrieved 27 Nov 2018, from http://upfi.info/about/.

Venner, Mary 2016: Donors, technical assistance and public administration in Kosovo. Manchester: Manchester Univ Press.

Wertz-Kanounnikoff, Sheila; Bruno Locatelli; Sven Wunder and Maria Brockhaus 2011: Ecosystem-based adaptation to climate change: what scope for payments for environmental services? In: Climate and Development, Volume 3(2), 2011, pp 143–158.

Wong, Susan and Scott Guggenheim 2018: Community-Driven Development. Myths and Realities: World Bank Group.

World Bank 2004: Evaluating Social Funds. A Cross-Country Analysis of Community Investments. Washington, D.C.: World Bank.

World Bank 2005: The Effectiveness of World Bank Support for Community-Based and -Driven Development. Washington, D.C.: World Bank.

World Bank 2008: Building Resilient Communities. Risk Management and Response to Natural Disasters through Social Funds and Community-Driven Development Operations: World Bank.

World Bank 2013: Crowdfunding's Potential for the Developing World. Washington, D.C.: World Bank.

World Bank 2014: Climate and Disaster Resilience. The role for community-driven development. Washington: World Bank.

World Bank 2016a: Malawi – Third Social Action Fund and Second Phase of Adaptable Program Lending Project. (MASAF 3) APL II (LDF Mechanism) Project. Washington, D. C.: World Bank.

World Bank 2016b: Social Funds. Retrieved 27 Nov 2018, from http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALPRO-TECTION/EXTSF/0,,contentMDK:20893987~menuPK:396384~page-PK:148956~piPK:216618~theSitePK:396378,00.html.

World Bank 2018a: Citizens' Charter Afghanistan Project. Retrieved 27 Nov 2018, from http://projects.worldbank.org/P160567?lang=en.

World Bank 2018b: Community-Driven Development. Retrieved 27 Nov 2018, from http://www.worldbank.org/en/topic/communitydrivendevelopment.

World Bank 2018c: Zambia Strengthening Climate Resilience (PPCR Phase II). Retrieved 27 Nov 2018, from http://projects.worldbank.org/P127254/zambia-strengthening-climate-resilience-ppcr-phase-ii?lang=en.

World Bank Group n.d.: Key Lessons from the Pilot Program for Climate Resilience. Shaping Climate Resilience for Transformational Change: World Bank.

World Bank Group 2001: Intergovernmental Fiscal Relations. Retrieved 27 Nov 2018, from http://www1.worldbank.org/publicsector/decentralization/fiscal.htm.

World Resources Institute 2013: The Plumbing of Adaptation Finance: Accountability, Transparency and Accessibility at the Local Level. Washington: World Resources Institute.

World Resources Institute 2017: The Future of the Funds. Exploring the Architecture of Multilateral Climate Finance. Washington, D. C.: World Resources Institute.

