

WORKING PAPER



How to scale out community-based adaptation to climate change

By Elizabeth Gogoi, Mairi Dupar, Lindsey Jones, Claudia Martinez and Lisa McNamara

April 2014

About this Working Paper

Development decision-makers increasingly recognise community-based adaptation (CBA) as a viable way to build communities' resilience to climate change, particularly those most vulnerable to its impacts. CBA puts them in the driving seat when it comes to designing and delivering adaptation options. However, until recently, analysis of the impacts beyond the immediate beneficiaries was not possible because not enough CBA projects had been implemented. As a result, most of the lessons about best practice have yet to be scaled out or included in wider development policies.

This Working Paper explains the initial thinking from the Climate and Development Knowledge Network (CDKN) on how to increase the scale and impact of CBA. It draws upon CDKN's experience and learning, and that of our partners, from a diverse range of contexts and projects. It is not comprehensive, but contributes some initial reflections on where and how opportunities exist for scaling out CBA pilot projects.

The idea for this Working Paper originated from the 'Mainstreaming CBA' conference, held in Dhaka, Bangladesh, during May 2013. A further prompt was CDKN's partnership with the International Institute for Environment and Development (IIED) during 2012-13 to support a community of practice on CBA. An amended version of this paper is due to feature as a viewpoint article in a special edition of the *Climate and Development* journal on CBA in 2014.

CDKN benefitted from a substantive external review of this paper by Hannah Reid (IIED), Katharine Vincent (Kulima), Tine Rossing (Independent Consultant) and Carina Bachofen (Red Cross). The authors would also like to thank Kelsey Jack (Tufts University and Innovations for Poverty Action), Samuel Bell (Cornell University and Shared Values Africa) and Graham Chilimina (NWK Agri-Services, formerly Dunavant Zambia) for their extensive review and contributions to the case study of community-based agroforestry in Zambia. Further thanks are owed to colleagues from CDKN and the CDKN Alliance Partners for their contributions to this paper, including: Alison Cambray, Ali T. Sheikh, Sam Bickersteth, Ari Huhtala, Beatrice Mosello, Arif Rahman, Haseeb Ahmed, Anam Zeb and Ronald Mukanya.

Elizabeth Gogoi is CDKN's Project Manager, based with LEAD in New Delhi, India, and also the Alliance's Lead for Knowledge Management in Asia. Mairi Dupar is CDKN's Global Public Affairs Coordinator and manages CDKN's learning programme on subnational climate compatible development. She is based at Overseas Development Institute (ODI) in London, UK. Lindsey Jones is a Senior Research Officer specialising in climate change adaptation at ODI. Claudia Martinez of E3 Asesorias is CDKN's Country Engagement Leader for Colombia and serves separately as an advisor on green growth to the Government of Colombia. Lisa McNamara is CDKN's Africa Knowledge Management and Partnerships Coordinator, based at SouthSouthNorth in Cape Town, South Africa.

Introduction

Around the world, hundreds of community-based adaptation (CBA) initiatives are helping to protect people's lives and livelihoods from the growing negative impacts of extreme weather and climate change. Successful CBA initiatives have significant benefits for the community involved. However, the number and geographical scale of these benefits is limited. There is a pressing need to learn from, act upon and scale out the lessons of these pilot projects (referred to here as 'pilots').

The 'Turn down the heat' study by the World Bank and Potsdam Institute¹ explores what the implications of 2°C and 4°C increases in global temperatures would mean for people in different regions around the world. The study suggests that with either scenario we will experience a world of climate and weather extremes causing devastation and human suffering. If warming rises to 4°C, the report predicts that "in many cases, multiple threats of increasing extreme heat waves, sea level rise, more severe storms, droughts and floods will have severe negative implications for the poorest and most vulnerable". Even if the world adopts the most ambitious greenhouse gas mitigation actions possible today, historic emissions have already contributed to harmful climate impacts that will endure for decades. Everyone must adapt to unavoidable changes to the climate system, and none more so than climate-vulnerable communities in Asia, Africa and Latin America.

Scaling out CBA

The impacts of climate change are context specific and the resources and capacity available for adaptation are locally defined. As a result, adaptation activities must be localised. However, there will be similarities in terms of climate change impacts and adaptation capacity across a wider area, so there is still potential for scaling out CBA solutions to other areas.

CBA pilots can test adaptation options that are suitable to a particular local area or even country, thus potentially benefitting a group much larger than the immediate community. There is plenty of literature on how development initiatives driven by a community can be expanded.² Gillespie³ has put forward a taxonomy of how this expansion can occur: i) quantitative, with an increase in size, geographical base or budget; ii) functional, with an increase in the scope and type of activities; iii) political, with an increase in political power and engagement with wider political processes; and iv) organisational, involving increases in organisational strength. As Gillespie recognises, more than one process can happen at the same time.

Much attention on scaling out CBA initiatives focuses on 'mainstreaming' CBA pilots into government development plans and programmes. This is particularly useful at province, state or national levels, where mainstreaming means creating institutional and policy support for, and mobilising revenue for, adaptation approaches that have been trialled at the local level. This is usually referred to as 'scaling up' and many CBA pilots include the objective to use lessons learned from practice to inform local- and national-level policy. This is an effective route and is often quite achievable. However, there is no single path to delivering CBA at a scale needed to have a significant impact.

This Working Paper focuses on experiences in the first category described by Gillespie, referred to here as 'scaling out' and defined as 'more quality benefits to more people over a wider geographical area,

Box 1. What is community-based adaptation?

The goal of CBA is to build the resilience of vulnerable individuals, households, communities and societies 'from the ground up'. Communities identify their adaptation needs and priorities, secure resources and take action. It is a community-led or 'community-driven' approach to adaptation that complements top-down planning and programmes.⁴

However, in most documented cases, external actors (usually non-governmental organisations [NGOs]) play an important role in facilitating this process. The main difference between a CBA project and a standard development project is not the type of intervention, but the way it is developed: not what the community is doing, but why and with what knowledge.⁵ For example, a defining feature of CBA is a community's ability to access and interpret climate information that is relevant to their context across different timescales. This is vital to shaping resilient adaptation strategies.

Up to now, researchers have focused largely on adaptation initiatives, but there is evidence of CBA pilots creating indirect mitigation co-benefits. In Fiji, leaders of a national initiative to increase climate resilience through more sustainable forest and land-use management have recognised the potential for reducing greenhouse gases through these activities. This in turn has enabled them to attract climate mitigation funding.⁶

:

more equitably, more quickly, and more lastingly'.⁷ Rather than higher-level policy integration, we focus on how multiple local actors can pilot small-scale innovations and showcase them until their approaches are replicated by multiple local actors, and a particular technology, practice or local regulatory approach becomes widespread.

An example is the expansion of 'farmer-managed natural regeneration' in Niger.⁸ For decades, Nigerien farmers cleared their fields of native trees and shrubs to increase the land available for crops. But this exposed their crops to fierce Sahelian winds. To combat this, farmers reintroduced centuries-old methods of managing tree species that re-sprout vigorously after being cut. Today, almost half of all cultivated land in Niger has a mix of trees, shrubs and crops. This reduces erosion and provides a continuous harvest of fuel, building materials, food and fodder without the need for replanting. At least 4.5 million people benefit and local communities are increasing their resilience.

In this case, the pathway for sharing best practices was by word of mouth and informal farmers' networks. For others, it has involved international or domestic NGOs providing support to key target groups, or even a private company (see page 6). The key challenge is to retain the fundamental principle of community empowerment. Irrespective of whether the final result is a widespread change in development practice via non-governmental means, or a major shift in government policy, we have identified several key elements that are common to successful cases of scaling out. Learning from CDKN's work in Bangladesh, Colombia and eastern and southern Africa regions, we provide insights into the role of:

- networks and partnerships
- documenting evidence and learning
- adaptive capacity

• institutional channels and finance mechanisms.

Factors that enable CBA to be scaled out

Help communities to adapt by promoting all characteristics of adaptive capacity

A core challenge for scaling out CBA beyond the pilot stage is that adaptive capacity and opportunities for delivering effective adaptation are localised. This means that the factors that allow for a successful project in one community may not translate or be replicable in another community. Much of this is due to the complex interactions between the various socio-cultural, economic and political factors that make up an individual or community's adaptive capacity.⁹ Despite this diversity, there are broad commonalities across a range of contexts at similar geographic scales.¹⁰

One of the core aims of the Africa Climate Change Resilience Alliance (ACCRA) is to better understand these commonalities. ACCRA is a network of four international NGOs and a research partner¹¹ working in Ethiopia, Mozambique and Uganda. ACCRA developed the local adaptive capacity framework as an analytical lens for assessing the impact of eight community-level development interventions on people's ability to adapt to change. This breaks adaptive capacity into five characteristics: i) access to and availability of assets; ii) institutions and entitlements; iii) knowledge and information; iv) innovation; and v) flexible forward-looking decision-making.¹²

ACCRA applied the local adaptive capacity framework to community-level projects instigated by its four large NGO members in each country. Using an action research model, they assessed how project activities affect each of the characteristics of adaptive capacity. ACCRA's experience points to three key conclusions, each with important implications for the design and delivery of CBA at larger scales.

First, the five characteristics of adaptive capacity do not act in isolation: they interact and depend on each other. Therefore, community-level adaptation interventions that focus on a single characteristic – such as the provision of assets and capitals – are unlikely to address the full spectrum of processes needed to support adaptive capacity.¹³ Seeking to understand and fully exploit the interconnected nature of each characteristic is central to successful adaptation, even if activities are targeted solely at one particular characteristic.

Second is a need to rethink participation. Adequately recognising community priorities in the implementation of CBA requires meaningful engagement with local actors. This means addressing power imbalances and developing a two-way sharing of knowledge and information that is rarely achieved in the delivery of 'traditional' development objectives.¹⁴ Though the principles of CBA place communities at the heart of any intervention,

ACCRA's activities highlight the need for local participation in all aspects of project development, from project identification and design through to choosing modalities of funding and delivery.

Third, autonomous innovation needs greater support. People's own ability to experiment and innovate, and the practice of this, is one of the key ways in which people enhance their individual agency. For CBA activities to successfully capitalise on this requires an understanding of how local agents are innovating, as well as the enabling factors and constraints to experimentation and the uptake of new ideas. These processes are rarely captured in the design and delivery of development and adaptation interventions facilitated by external actors.¹⁵ ACCRA's experiences show that understanding the factors that support a community's capacity to adapt are crucial to successfully scaling out CBA. If this is lacking, programmes risk promoting maladaptive practices or only supporting single and isolated characteristics of a community's adaptive capacity. More importantly, ACCRA's findings show how future CBA activities can learn from the successes and failures of wider development interventions, many of which are well documented.

To date, CBA practitioners have had a narrow focus on community-level actors. But scaling out requires CBA approaches and tools to be adopted not only by NGOs and civil society, but also by important development actors such as governments and the private sector. This can be achieved in a number of ways, such as ensuring that the principles of CBA are incorporated into local and national development plans or providing evidence that bottom-up adaptation is vital for financial sustainability.

Actions such as these are key steps to extending CBA beyond local-level actors, and promoting greater community empowerment among other influential partners. For example, the ACCRA programme initiated a number of exercises to teach local governments about the importance of engaging with communities for future planning. These helped to strengthen the ties between local communities and district actors, as well as helping to ensure that community priorities featured more prominently in district development plans. Joseph Orisa, Information Officer for the District of Kotido in Uganda, said, "Planning used to be desk-based. Since the ACCRA workshop and capacity-building activities, there has been an increase in the number of community engagements in planning and prioritisation, and issues of climate change come up frequently."¹⁶

Make networks and partnerships the cornerstone

The climate change adaptation activities carried out in Cartagena, a city on Colombia's Atlantic coast, are not typical of CBA. But the relatively small urban population (fewer than 900,000 people) and the nature of how the adaptation options were designed mean that they warrant inclusion as an example of CBA.

Cartagena faces immediate and future threats from a changing climate, including increases in the frequency and severity of flooding and storms, and rising temperatures. These are destroying beaches and corals, driving the spread of diseases, and increasing the risk of human displacement.¹⁷ These threats to the city's social, economic and public health sectors have put climate change on the agenda of the city's government.

Cartagena's civic leaders, NGOs, businesses and city government worked together to assess and understand climate impacts, and prepare a climate vulnerability assessment and adaptation plan. This demonstrates how diverse actors' comparative strengths – in technical, financial and human resources, and in local knowledge – can blend to achieve policy progress.

The Instituto de Investigaciones Marinas y Costeras (INVEMAR, the Colombian Institute of Marine and Coastal Research), which collects data on sea level rise and extreme events, has been at the forefront of documenting climate change impacts for over a decade. In 2011-12, INVEMAR forged an alliance with the municipality of Cartagena, the Cartagena Chamber of Commerce and CDKN to undertake the city's first comprehensive vulnerability assessment and work toward adaptation actions. The partnership has successfully undertaken an inclusive and participatory vulnerability assessment, which is informing decisions on where and how to prioritise adaptation. The 'Cartagena Development Plan 2012-2016' emphasises actions to improve the response to natural disasters and climate change, including actions for land-use planning, social development and infrastructure.

The municipal government's institutional support has been particularly important in this achievement. Despite tumult in the mayor's office, with four different mayors in two years, it has provided constant institutional support via senior civil servants in the city administration. INVEMAR has played a critical role in framing the discussion, for example by using downscaled climate models and graphics (see Figure 1) to produce visual displays of

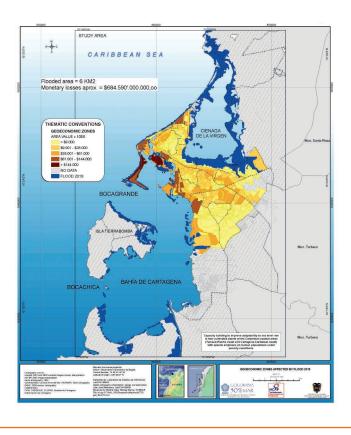
÷

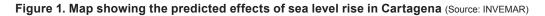
how the city will be affected by future sea level rise. These have an arresting power to demonstrate the grave threat, even under the most optimistic climate scenarios, to Cartagena's highly valued and lucrative assets: its beaches, tourist hotels, architectural heritage, nationally strategic port and industrial zone.

Despite initial scepticism, business leaders have played an important role in ensuring that adaptation options are prioritised within local planning processes. Local business leaders did not want to accept the scientific case that investments on the waterfront, such as hotels, would lose viability in 20 to 50 years. The solution was to change the narrative and work constructively with business leaders. One of the project team's key areas of learning has been to frame issues in the language of business, to persuade business leaders to offer support. This means posing questions such as: if you are a business that has failed to consider climate impacts, how does that affect your reputation and security of assets? How can you demonstrate to investors that your foresight in planning for sea level rise and increased storms and flooding will provide a competitive advantage and security of investment over the long term?

This leadership and innovation on adaptation by the city 'community' has caught the attention of other cities. The governments of other Colombian municipalities recognise Cartagena as a 'first mover' on planning for adaptation. Scaling out is occurring simultaneously on two fronts: the government is watching the Cartagena process closely as it develops and refines its own national-level adaptation plans, and other cities in Colombia are looking to see how elements of Cartagena's approach can be adopted by their own administrations.

Local partnerships have been the cornerstone for progress in Cartagena so far, and increase the likelihood that the city's Adaptation Plan will be adequately implemented: it is formally part of the city's Municipal Development Plan 2013-15. In this case, the partnerships between those who understand and can communicate climate science, business people with influence in local politics, and local government decision-makers and institutions such as the port, environment and maritime authorities, have been critical. In addition, the involvement of vulnerable groups within the community, assisted by experienced NGOs, has been important in a city with a large proportion of poor people. Similar partnerships will be central to other successful CBA pilots, in Colombia and beyond, and partnerships should be appropriate to local contexts.





÷

The catalytic role of 'expert' actors, as seen in Cartagena and usually an NGO or international agency, is typical of most documented CBA pilots.¹⁸ Communities experience climate impacts first-hand and are frequently able to deploy indigenous knowledge or generate their own innovations to adapt to climate extremes and disasters. At the same time, NGOs are often in a position to provide the necessary resources and technical support, and provide continued access to information about the changing climate and its impacts.¹⁹ NGOs have proved to be an important and often essential actor in many successful CBA pilots. However, once successful in providing essential information, external actors should evolve their roles and respond to an emerging set of needs and interests in the community. Having a network of partnerships between the community and outside agents, who themselves have national and international connections, provides a valuable structure and institutional support. When successes are achieved at the local level, these broader geographic networks – of NGOs and government leaders – can often help to spread best practice and enable scaling out.

Document evidence and learning to make the case for scaling out

Bangladesh has been labelled the 'adaptation capital of the world' by climate adaptation specialists.²⁰ It has been a pioneer in CBA and has a flourishing NGO sector supporting pilot initiatives throughout the country. Bangladesh is now establishing platforms and networks that are bringing visibility and accountability to CBA pilots, in order to encourage scaling out. Eleven international NGOs,²¹ together with local and international research partners,²² have joined forces to carry out a long-term research programme called 'Action Research on CBA in Bangladesh' (ARCAB). In addition to research, the group is a platform to jointly promote CBA in particular, and their work in Bangladesh in general. Many of the partners involved in ARCAB have also been organising or supporting annual international conferences on CBA, which often take place in Bangladesh.

There is evidence that a 'community of practice' on CBA has emerged as a result.²³ This is different to a 'community of interest', as the members aim to put the knowledge gained into action.²⁴ One function of a community of practice, which has been nurtured at CBA conferences and within the network of partners, is to 'amplify' little known or poorly understood experiences, ideas and concepts. This provides a space for these to be debated and more widely understood and shared.²⁵ This space has been expanded into two new online forums – weADAPT²⁶ and the Community-Based Adaptation Exchange²⁷ – further increasing the availability of information about CBA initiatives. There is anecdotal evidence that these networking opportunities have increased exposure to CBA pilots and practitioners, which has in turn led to some instances of scaling out. However, more analysis is needed to fully understand the impact of these initiatives.²⁸

A CBA pilot should only be considered for scaling out if it can prove its value. ARCAB recognises this and the partners are investing in monitoring and evaluating several CBA pilots. A framework, tool and manual for participatory monitoring and evaluation have already been developed. These consider: whether the achievements match expectations; whether the achievements were the right ones; whether the project is being done in the right way, and; whether it is reaching the right scale.²⁹ ActionAid in Bangladesh evaluated their CBA pilots in Bangladesh using this process to consider the extent to which resilience has been built, and at what scale. It found that while their interventions moved beyond 'business as usual' approaches to development and disaster risk reduction, the communities need further support for anticipating and adapting to longer-term climate change risks.³⁰

Before a CBA pilot becomes a viable candidate for scaling out, this learning and reflection must move beyond how effective the pilot is, to consider how efficient it is and the scale of benefits for communities relative to the level of investment.³¹ Assessing the cost–benefit ratio of a CBA pilot is critical. One of the key reasons why there have been few success stories for scaling out CBA pilots is that many are considered too time and resource intensive.³²

The experiences of the CBA community of practice in Bangladesh indicate that for a pilot to be scaled out by other institutions and actors, it needs to be well documented and well known to policy-makers and development partners, as well as evaluated. The last point is perhaps the most important: scaling out should only be considered for CBA pilots that can demonstrate their effectiveness in building the adaptive capacity of the target beneficiaries. These key enabling factors – visibility, documented evidence of success and learning – also relate to, and rely upon, an expanded set of the partnerships and relationships discussed in the previous section. Practitioners working on CBA in Bangladesh have progressed further than most in this regard, illustrating the interconnections required between understanding and learning from CBA pilots and scaling out.

:

Find cost-effective institutional channels and finance mechanisms

Even if the value and potential of a CBA pilot has been proven, an institution needs to be willing and able to lead the delivery of the scaling out (even when supported by a network of committed partners). This is often assumed to be a government agency: political will, competent institutions and a decentralised form of government are seen as conducive to scaling out.³³ In this case, informing national or subnational policy, plans and programmes is the objective.

The relationship between bottom-up, community-driven development and the scaling down of governmental power, responsibility and resources has been examined in the existing literature.³⁴ Local governments often play an important intermediary role, with responsibility for implementing national policies and programmes, and sometimes with significant freedom to define where and how finance should be dispersed. They are therefore a potential source of funding for CBA, as well as an avenue for new ideas from CBA pilots to transmit upwards into national policy. But the decentralisation of decision-making and management has to go further – to the community – if CBA is to retain its unique community-driven character. The institutional and funding structures needed to manage the scaling out of a CBA pilot therefore have to be flexible and allow culture and indigenous norms or knowledge to determine outcomes.³⁵

Although governments often play a significant intermediary role in scaling out CBA pilots, emerging evidence suggests that private sector actors are an important alternative. A programme promoting the adoption of agroforestry by smallholder farmers in Zambia's Eastern Province provides a good case study.

Since the mid-1990s, Zambia's Conservation Farming Unit and the World Agroforestry Centre (ICRAF) have pioneered community-based agroforestry and conservation farming programmes as a way to improve yields.³⁶ Dunavant Zambia, the largest cotton ginning³⁷ company in Zambia, recognised the potential of these programmes. The company works with over 100,000 smallholder farmers annually through a contract farming system – a common model for sub-Saharan Africa. Contract or outgrower farming takes a number of institutional forms and involves prior agreements for farmers to produce an agricultural product in a certain manner for a buyer, with a guaranteed price.³⁸ Buyers, mostly large agri-businesses, often provide technical assistance, seeds, fertiliser and other inputs on credit.³⁹

Many climate-resilient agricultural technologies (such as tree crops, agroforestry and conservation farming) yield long-term benefits, but their upfront input costs are high for smallholder farmers relative to their benefits, which may be small, in the distant future and shared with others. This often discourages adoption, as smallholders tend to be more focused on short-term financial and livelihood needs.⁴⁰ However, firms such as Dunavant Zambia have a commercial interest in ensuring they encourage long-term soil fertility and high agricultural yields.

Dunavant Zambia formed a partnership with Shared Value Africa (SVA),⁴¹ an NGO focused on sustainable development in southern Africa, through the 'Trees on Farms' programme. This encourages farmers to plant fertiliser trees to increase long-term soil fertility and crop yields. Dunavant Zambia provides farmers with a training programme and input delivery chains, while SVA provides further training and tree inputs (seeds, planting sleeves).

The musangu (*Faidherbia albida*) tree, an agroforestry species native to Zambia, is among the species promoted through the 'Trees on Farms' programme. Musangu trees provide a natural fertiliser option for crops and savings on fertiliser costs, which have doubled in Zambia since 2007.⁴² Tree planting also sequesters global carbon, and agroforestry has been ranked first among possible land-use strategies for reducing emissions from deforestation and forest degradation (REDD+) programmes in Zambia.⁴³

SVA is exploring the potential of raising carbon revenue from the programme to support its scaling out.⁴⁴ However, there are problems with carbon markets in Africa and elsewhere, for example low carbon prices and limited demand. Many projects have not moved beyond formative stages, so the potential for carbon revenue to help finance scale out of CBA should not be overestimated.⁴⁵

The scaling out process for the 'Trees on Farms' programme has not yet reached all the members of Dunavant Zambia. It is limited by SVA's funding constraints and changes in the ownership of Dunavant Zambia. There are still encouraging signs, however. Innovations for Poverty Africa (IPA), a non-profit research organisation, worked with the implementing partners to develop a pilot evaluation of the opportunities and barriers to

adoption, and tree survival rates. The study showed that many farmers wanted to join the programme, with 83% uptake among the 1,300 farmers participating in the study. At the end of the first year, there were 19,400 surviving trees⁴⁶ under the care of 700 farmers in the research group.⁴⁷

Dunavant Zambia and SVA scaled out the programme to include the central and southern parts of Zambia, and reached more than 15,000 farmers in 2013. Although full scale out is yet to occur, the early results and the productive partnership between the company and the NGO suggest that a larger scale out is possible in future.⁴⁸ According to Kelsey Jack, Principle Investigator, ⁴⁹ "This project demonstrates that making CBA commercially viable is a promising strategy for scaling out pilots. Private sector flexibility and openness to innovation make commercial companies important role-players in experimenting with novel ways to expand to new communities." However, working with private and public sector actors may pose similar challenges. In the case of the private sector, personnel or ownership changes and budgetary constraints can slow down the scaling out process. This is not necessarily different from the public sector, where elections and economic factors may hamper progress.

Commodity crop firms such as Dunavant Zambia have systems and infrastructure in place that can be used for CBA, which may improve efficiency and cost-effectiveness. These include technical assistance and training services for farmers, and networks for distributing agricultural inputs such as seeds and fertiliser. Every year Dunavant Zambia trains its farmers on cotton production, which could potentially integrate climate-resilient practices.⁵⁰ Farmers working with a commercial firm may also motivate other firms to adopt similar practices, as they realise the benefits of climate-smart agricultural practices. Despite the private sector being the agent delivering CBA scaling out in this case, the government still played an important role by providing supportive policy frameworks, such as subsidising natural fertilisation methods.⁵¹

Conclusions

These case studies demonstrate that there is not one single model for scaling out CBA pilots. Mainstreaming CBA into development planning processes is one option, while actors such as local and national government and the private sector are also potential partners for scaling out. The context determines where and how this can be achieved.

However, the learning from these projects suggests that there are some key enabling factors that support the process. This paper does not include an exhaustive list of factors, but highlights those most prominent in CDKN's projects. Further documentation and assessment of CBA pilots that have been successfully scaled out is required to identify the enabling factors and constraints involved. In addition, the interactions between these factors need to be considered, for example how partnerships are reinforced when both sides have strong capacity. These interactions need to be documented to allow for learning and a shared understanding of what works and what does not. A more rigorous analysis of these enabling factors will assist practitioners in prioritising such considerations when implementing CBA pilots.

To summarise the initial learning on how to scale out CBA, and some possible implications for practitioners involved in CBA, we have identified some important enabling factors (see Table 1).

Questions for discussion

- What opportunities and challenges do you see for scaling out CBA?
- What elements of CBA do you think are successful in the community where you are working, and why?
- To what extent do you think the successful approaches you have used could be adopted in similar local contexts?
- Which elements do you think were wholly specific to your community and could not be adopted elsewhere?
- What can other communities learn from your experience?
- How can NGOs, private businesses, donors and government agencies help scale out successful CBA initiatives?

Please share your experiences by emailing enquiries@cdkn.org, with subject line 'Scaling out community based adaptation'. You can also join the interactive discussion online:

www.linkedin.com/company/climate-and-development-knowledge-network

-

Table 1. Factors that enable community-based adaptation

Enabling factor	Implication
Adaptive capacity	
The success of a CBA pilot depends on building the adaptive capacity of the local community. It is therefore important to identify whether common success factors would ensure that this process could be effective across geographical locations (while recognising that some success factors may not be transferable, given the highly context- specific nature of CBA). This refers to the intended beneficiaries, but also the partners involved in the process, including local officials and NGOs.	Understanding the factors that have made a CBA pilot a success, as well as reasons for any failures, and identifying which of these are present in other locations, will ensure it is only replicated where there is a good chance of having an impact.
Networks and partnerships	
External partners working with a community, for example providing resources and knowledge, are often a key factor in a successful CBA pilot. These partners can access and influence wider processes and other agents, such as a government body or funding programme, to advocate for and facilitate scaling out. However, external partners have their own interests and priorities. Collective efforts for scaling out will only succeed when these overlap with a community's interests.	When designing a CBA pilot with the community, partners are included if they bring additional skills and are connected to and able to use potential avenues for scaling out. Synergies between the interests of the different partners should be found, including an effort to 'speak the language' of each other. This requires understanding each other's interests and expectations, finding common ground, and co-creating a shared vision of scaling out CBA.
Document evidence and learning	
Demonstrating the costs and benefit of a CBA pilot, and the potential impact if it is delivered at a larger scale, is an important piece of evidence in the case for scaling out. The necessary second step is to share this information and build connections and consensus with people able to scale out a CBA pilot.	New tools and approaches to monitor and evaluate CBA pilots, and to measure changes in adaptive capacity, need to be developed and tested. It is important to build ways to increase the visibility of a pilot into its design. Every effort should be made to reduce the inputs and costs of a CBA pilot, while preserving the essential characteristics, to find the optimum balance between costs and benefits.
Institutional channels and finance mechanisms for scaling out	
Delivering CBA at a larger scale requires some form of public or private institutional and funding structures. These are needed to integrate the pilot into wider programmes or processes. These must be flexible enough to allow communities to remain in the driving seat of the initiative.	Government schemes and policies are not the only potential route for scaling out; the private sector should also be considered. When designing a CBA pilot, such opportunities should be identified and relationships forged with the relevant agent.

Endnotes

- 1 World Bank (2013) *Turn down the heat: climate extremes, regional impacts and the case for resilience.* Washington, D.C.: World Bank.
- 2 IIRR (2001) 'Going to scale: can we bring more benefits to more people more quickly?'. Workshop highlights presented by the CGIAR-NGO Committee and the Global Forum for Agricultural Research, with Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung/ MISEREOR/Rockefeller Foundation/International Rice Research Institute/International Institute of Rural Reconstruction. New York: International Institute of Rural Reconstruction (www.ngoccgiar.clades.org/index0. html); Binswanger-Mkhize, H.P. and Aiya, S.S.A. (2003) 'Scaling up community-driven development: theoretical underpinnings and program design implications'. Policy Research Working Paper 3039. Washington, D.C.: World Bank; Hancock, J. (2003) 'Scaling up the impact of good practices in rural development: a working paper to support implementation of the World Bank's rural development strategy'. Report 2031. Washington, D.C.: World Bank.
- 3 Gillespie, S. (2004) 'Scaling up community-driven development: a synthesis of experience'. FCND Discussion Paper 181. Washington, D.C.: Food Consumption and Nutrition Division, International Food Policy Research Institute.
- 4 CARE (2012) Participatory monitoring, evaluation, reflection and learning for community-based adaptation: a manual for local practitioners. London: CARE International.

- 5 Ensor, J. and Berger, R. (2009) 'Community-based adaptation and culture in theory and practice', in W.N. Adger, I. Lorenzoni and K.L. O'Brien (eds), Adapting to climate change: thresholds, values, governance. Cambridge: Cambridge University Press.
- 6 Ward, M. (2011) 'The case for Evergreen Agriculture in Africa: enhancing food security with climate change adaptation and mitigation in Zambia'. CDKN Inside Story. London: Climate and Development Knowledge Network.
- 7 IIRR (2001) op. cit.
- 8 Cameron, E. (2011) 'From vulnerability to resilience: farmer-managed natural regeneration in Niger'. CDKN Inside Story. London: Climate and Development Knowledge Network.
- 9 Grothman, T. and Patt, A. (2005) 'Adaptive capacity and human cognition: the process of individual adaptation to climate change', *Global Environmental Change* 15(3): 199–213.
- 10 Vincent, K. (2007) 'Uncertainty in adaptive capacity and the importance of scale', *Global Environmental Change* 17(1): 12–24.
- 11 Oxfam GB, Save the Children, World Vision, CARE and the Overseas Development Institute.
- 12 Jones, L., Ludi, E. and Levine, S. (2010) 'Towards a characterisation of adaptive capacity: a framework for analysing adaptive capacity at the local level'. ODI Background Note. London: Overseas Development Institute.

- 13 Levine, S., Ludi, E. and Jones, L. (2011) *Rethinking* support for adaptive capacity to climate change. The role of development interventions. London: Overseas Development Institute.
- 14 Levine, S. et al. (2011) Ibid.
- 15 Ludi, E., Jones, L. and Levine, S. (2012) 'Changing focus? How to start taking adaptive capacity seriously'. ODI Briefing Paper. London: Overseas Development Institute.
- 16 Kull, T. (2013) 'When Kotido District Local Government appreciated flexible and forward looking decision making'. Africa Climate Change Resilience Alliance (http:// community.eldis.org/accra/.59d669a6/.5bbc0d87).
- 17 Adams, P. and Castrol, J., with Martinez, C. and Sierra-Correa, P. (2013) *Embedding climate change resilience in coastal city planning: early lessons from Cartagena de Indias*. London: Climate and Development Knowledge Network.
- 18 Mansuri, G. and Rao, V. (2004) 'Community-based and demand-driven development: a critical view', World Bank Research Observer 19(1): 1–39.
- 19 Allen, K.M. (2006) 'Community-based disaster preparedness and climate adaptation: local capacitybuilding in the Philippines', Special Issue: Climate change and disasters 30(1): 81–101.
- 20 Huq, S. (2013) 'Climate change experts head to "adaptation capital of the world"'. IIED press release. London: International Institute of Environment and Development (www.iied.org/climate-change-expertshead-adaptation-capital-world).
- 21 Caritas, Christian Aid, Concern Worldwide, Islamic Relief Worldwide, Oxfam, CARE, Plan, Save the Children, Practical Action, WaterAid and ActionAid.
- 22 WorldFish, University of Melbourne, Stockholm Environment Institute, United Nations University, Institute for Human Sciences (IWM), International Rice Research Institute, Institute of Development Studies, International Centre for Diarrhoeal Disease Research, Bangladesh, University of Rajshahi, IIED, Independent University, Bangladesh Centre for Advanced Studies.
- 23 Gundel, S., Anderson, S., Kaur, N. and Schoch, C. (2013) Assessing the CBA community of practice. London: International Institute of Environment and Development.
- 24 Wenger, E., McDermott, R. and Snyder, W.M. (2002) *Cultivating communities of practice*. Boston, MA: Harvard Business School Press; Cummings, S. and van Zee, A. (2005) 'Communities of practice and networks: reviewing two perspectives on social learning', *KM4D Journal* 1(1): 8–22.
- 25 Gundel et al. (2013) op. cit.
- 26 http://weadapt.org
- 27 http://community.eldis.org/.59b70e3d
- 28 Gundel et al. (2013) op. cit.
- 29 ARCAB (2012) ARCAB M&E and baseline strategy for CBA: final report. Dhaka: Action Research for Community Adaptation in Bangladesh; Faulkner, L. and Ali, I. (2012) Moving towards transformed resilience: assessing community-based adaptation in Bangladesh. Dhaka: ActionAid Bangladesh; Dhaka: Action Research for Community Adaptation in Bangladesh; Dhaka: International Centre for Climate Change and Development; Dhaka: Bangladesh Centre for Advanced Studies.

- 30 Faulkener, L. and Ali, I. (2012) Ibid.
- 31 Sova, C.A., Chaudhury, A.S., Helfgott, A. and Corner-Dolloff, C. (2012) 'Community-based adaptation costing: an integrated framework for the participatory costing of community-based adaptations to climate change in agriculture'. CCAFS Working Paper 16. Cali: CGIAR Research Program on Climate Change, Agriculture and Food Security.
- 32 Binswanger-Mkhize, H.P. and Aiya, S.S.A. (2003) op. cit. 33 Ibid.
- 34 For example: Uvin, P. and Miller, D. (1994) Scaling up: thinking through the issues. Rhode Island: World Hunger Program; Agrawal, A. and Ostrom, E. (2008) 'Decentralization and community-based forestry: learning from experience', in E.L. Webb and G. Shivakoti (eds), Decentralization, forests and rural communities. Thousand Oaks: SAGE.
- 35 Ensor, J. and Berger, R. (2009) op. cit.
- 36 Ward, M. (2011) op. cit.
- 37 Ginning is the process of removing cotton fibres from the seeds.
- 38 Minot, N. (2011) 'Contract farming in Africa: opportunities and challenges'. Paper presented at the AAMP policy seminar, 'Smallholder-led agricultural commercialization and poverty reduction: how to achieve it?', organised by the African Agricultural Markets Campaign (AAMP), in Kigali, Rwanda, 18–22 April (http://fsg.afre.msu.edu/ aamp/Kigali%20Conference/Minot_Contract_farming_ (AAMP%20Kigali).pdf).
- 39 Eaton, C. and Shepherd, A. (2001) 'Contract farming: partnerships for growth'. Agricultural Services Bulletin 165. Rome: Food and Agriculture Organization (www. fao.org/DOCREP/004/Y0937E/y0937e00.htm#toc).
- 40 IPA (2013) Encouraging the adoption of agroforestry: a case study in Eastern Province, Zambia. Practical lessons learnt. New Haven: Innovations for Poverty Action (www. poverty-action.org/Lusaka_Chipata_Agroforestry).
- 41 www.sharedvalueafrica.com
- 42 Ward, M. (2011) op. cit.; IPA (2013) Ibid.
- 43 Kokwe, M. (2012) Forest management practices with potential for REDD+ in Zambia. UN-REDD Programme Report. Geneva: United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (www. theredddesk.org/sites/default/files/resources/pdf/2012/ unredd_zambia_web.pdf).
- 44 IPA (2013) op. cit.
- 45 Ward, M. (2011) op. cit.
- 46 The programme provided the inputs for around 50,000 trees, but it is not clear exactly how many were planted.
 47 IPA (2013) op. cit.
- F7 IFA (2013) 0p. cit.
- 48 Jack, K. (2013) Interview, 14 May 2013.
- 49 Co-principle Investigators on the project are Samuel Bell (Cornell University and Shared Values Africa), Paulina Oliva (University of California, Santa Barbara), Christopher Severen (University of California, Santa Barbara) and Elizabeth Walker (Harvard University).
 50 Jack, K. (2013) op. cit.

:

51 Ward, M. (2011) op. cit.

About CDKN

The Climate and Development Knowledge Network (CDKN) aims to help decision-makers in developing countries design and deliver climate compatible development. We do this by providing demand-led research and technical assistance, and channelling the best available knowledge on climate change and development to support policy processes at country and international level. CDKN is managed by an alliance of six organisations that brings together a wide range of expertise and experience.

About ODI

The Overseas Development Institute (ODI) is the UK's leading independent think tank on international development and humanitarian issues.

About LEAD

LEAD is the world's largest international non-profit organisation focused on inspiring leadership and change for a sustainable world. LEAD identifies and recruits outstanding leaders from government, business, NGOs and academia and, through a world class training programme, equips them with the skills for sustainable decision-making and provides them with a global network of peers to help them address sustainability challenges.

About E3

E3 is a Latin American consulting firm which advises and supports public and private entities in promoting the principles of ecology, economics and ethics as an integral part of their business strategy. E3 develops innovative solutions, winning strategies and manages projects and programmes on behalf of entities that forge new economies more conscious of the wellbeing of our planet.

About SouthSouthNorth

SouthSouthNorth finds evidence-based, locally tailored solutions to climate and development challenges in partnership with leading organisations. SouthSouthNorth contributes to global knowledge in order to achieve climate compatible development in practice.



www.cdkn.org

e: enquiries@cdkn.org



This document is an output from a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID or DGIS, who can accept no responsibility for such views or information or for any reliance placed on them. This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, the entities managing the delivery of the Climate and Development Knowledge Network do not accept or asyme any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication based on it. CDKN is led and administered by PricewaterhouseCoopers LLP. Management of the delivery of CDKN is undertaken by PricewaterhouseCoopers LLP, and an alliance of organisations including Fundación Futuro Latinoamericano, INTRAC, LEAD International, the Overseas Development Institute, and SouthSouthNorth.

Copyright © 2014, Climate and Development Knowledge Network. All rights reserved