

## Policy pointers

**The institutional, governance and policy context of community-based adaptation (CBA) and ecosystem-based adaptation (EBA) initiatives should be addressed, while ensuring communities remain central to planning.**

**Rigorous analysis of the effectiveness of CBA and EBA initiatives should be ongoing.**

**Opportunities to scale up CBA and EBA initiatives through mainstreaming, and replicating and diversifying to other sectors, should be explored.**

**Providing communities with additional short-term incentives can motivate them to take on adaptive practices.**

## Ecosystem- and community-based adaptation: learning from natural resource management

Ecosystem-based adaptation (EBA) and its sister community-based adaptation (CBA) have gained traction over recent years, and policymakers and planners are increasingly promoting an integrated approach to EBA and CBA. These integrated approaches have the potential to benefit the world's poorest people who are worst hit by climate change and also disproportionately reliant on ecosystems and their services. Improved learning from older natural resource management disciplines such as community-based natural resource management could help inform EBA and CBA practice and policymaking to achieve this aim. This briefing paper describes key lessons from community-based natural resource management that EBA and CBA should address as they mature.

### Adopting an integrated approach to CBA and EBA

Well-managed, stable, diverse ecosystems benefit adaptation.<sup>1</sup> For example, coastal mangroves provide protection against cyclone damage and storms, wetlands act as floodwater reservoirs and well-vegetated hillsides reduce risks from erosion, landslides and downstream flooding. The United Nations Convention on Biological Diversity defines ecosystem-based adaptation (EBA) as “the use of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change as part of an overall adaptation strategy”.<sup>2</sup>

There is some evidence to suggest that EBA can be a cost-effective approach to adaptation<sup>3</sup> and considerable evidence that it can generate a multitude of social, economic and environmental co-benefits.<sup>4</sup> Communities have been using natural resources, genetic diversity and their knowledge about the functioning of species and

ecosystems to adapt to climate variability for generations.

Community-based adaptation (CBA) can also offer a cost-effective way to tackle climate change by capturing communities' knowledge and experience in dealing with climate variability and change. CBA is a bottom-up process that builds on local needs and capacities.<sup>5</sup> It is based on human rights-based approaches that target the most vulnerable people and fully includes them in adaptation planning and implementation. It can also operate at scale, for example through mainstreaming into government processes, but with communities remaining central to planning and action.

CBA has been championed primarily by development practitioners, and EBA by environment and conservation practitioners. While these groups have different values, institutional agendas and funding sources, substantial overlap exists in their conceptual

## *CBA and EBA interventions should place communities at the centre of planning*

approaches. Local adaptation activities tend to combine both approaches, and EBA is often indistinguishable from CBA. Environment- and development-oriented organisations are increasingly adopting integrated approaches to adaptation policy, planning and implementation.<sup>6</sup> This breaks down the artificial divide between CBA and EBA and builds on the

strengths of both to address the shortcomings of mainstream top-down, hard infrastructure-based approaches to adaptation.

Better integration is also occurring at international and national levels. UNFCCC processes, such as the Cancun Adaptation Framework, Nairobi Workplan, Adaptation Fund, REDD+ planning, National Adaptation Plans, and National Adaptation Programmes of Action (NAPA) guidance and implementation, increasingly recognise and support the role of natural resource management as an adaptation strategy. Some national climate change policies and strategies, and sector-based policies (for example, on water, forests and coastal zone management) also recognise the role ecosystems play in adaptation.

### **Community-based natural resource management: Lessons for EBA and CBA**

In the 1970s and 1980s, theorists and practitioners promoted community-based natural resource management as an alternative to more traditional conservation approaches such as national park establishment, fences, armed rangers and the separation of natural resources from the local people who had previously relied on them.<sup>7</sup> It emerged for a number of reasons including a growing body of international human rights law and concern about the social injustices associated with the establishment of some national parks; increasing awareness of indigenous management skills and the limitations of protected areas alone in terms of meeting conservation goals; and demand for natural resources to 'earn their keep'.<sup>8</sup>

Community-based natural resource management aimed to introduce more bottom-up approaches to conservation, based on the notion that if local people were allowed to manage the land and its resources, both conservation and local development goals could be met. Conservation and donor agencies developed a range of community-based models linking conservation and development and a number of core principles

emerged (see Box 1). We go on to present some of the key lessons that newer disciplines such as CBA and EBA can learn from these.<sup>9</sup>

### **Ensure vulnerable communities are central to planning**

CBA and sometimes EBA have been heralded as 'bottom-up' approaches to adaptation, as was community-based natural resource management for conservation. However, in the 1990s, after more than a decade of experience with community-based natural resource management many observers claimed such approaches were failing to deliver the benefits promised. Responding to these criticisms, Marshall Murphree observed that community-based natural resource management "has to date not been tried and found wanting; it has been found difficult and rarely tried."<sup>10</sup> He felt that many approaches labelled as 'community-based' were in practice externally initiated and used as a veneer for top-down management, and that genuine systematic attempts to adopt participatory planning methods were rare.<sup>11</sup> Therefore, any CBA or EBA intervention should take care to place communities at the centre of planning, and should assess whether they remain central as the initiative progresses.

Historically, some development work has been relabelled as CBA, perhaps to secure climate change donor funding. Similarly, community-based conservation projects have been relabelled as EBA. But practitioners must be wary of discrediting the EBA and CBA concepts by labelling other activities as such. Genuine CBA or EBA initiatives require climate change risk and vulnerability to be central to planning.<sup>12</sup>

### **Demonstrate effectiveness**

In the 1990s some scientists argued that community-based natural resource management's focus on economic benefits and development had been a conservation disaster, stimulating rather than reducing demand for natural resources. They argued that preservationist approaches had been effective at conserving important biodiversity, while accusing community-based natural resource management of being politically motivated and unsupported by evidence.<sup>13</sup> This forced its proponents to respond with evidence-based counter-arguments, illustrating the importance of gathering evidence for CBA and EBA.

As both disciplines are relatively new, they lack experience to learn from, and need more analytical rigour to assess their effectiveness in different circumstances, their benefits, costs and limits.<sup>14</sup> A recent review of the literature relating to

EBA found a lack of consistent use of terminology: this makes it hard to recognise and evaluate existing evidence.<sup>15</sup> Also, many practitioners involved in CBA and EBA activities work at field level, and while learning must go hand-in-hand with doing, anecdotal evidence from field level activities currently far outweighs objective analysis. EBA is often described as more effective and cheaper than hard engineered approaches to adaptation, but confirmatory scientific evidence is lacking. Similarly, much literature focuses on the benefits of EBA and CBA interventions but lacks detail on the social, economic and environmental costs<sup>4</sup> or avoided losses due to disaster risk reduction.<sup>16</sup>

### Address the institutional, governance and policy context

Community-based natural resource management was initially seen in part as a response to an environmental problem. However, it is now viewed as an institutional or organisational development programme whereby natural resources are used to empower local people economically. This is a result of the processes and institutions the approach has established including: creating space for the direct and practical involvement of communities, devolving rights and management authority from central government to communities recognised by policy and law,<sup>17</sup> collective 'ownership' of these natural resources by well-defined local communities, and establishing mechanisms to ensure the provision of tangible benefits for communities. Central to this is engagement with effective legitimate local institutions that incorporate, or are based on, appropriate traditional forms of governance.<sup>11</sup>

CBA and EBA should now do more to address the institutional, governance and policy context in which initiatives operate, as this will be pivotal to their ultimate success. This is as true for local institutions as for the higher level institutions and policies on which communities depend.

CBA emphasises the importance of participatory tools, but should also build the capacity of local practitioners to forge strong links with higher political structures to achieve this.<sup>18</sup> CBA cannot operate exclusively at the community level, because external factors, such as political commitment to large-scale irrigation, forestry or livestock ranching, can hugely increase communities' vulnerability to climate change.<sup>19</sup> How EBA interventions contribute to or are supported by particular policies remains unclear for now<sup>4</sup> although some EBA theorists argue that flexible management structures are central.<sup>20</sup>

Those promoting integrated CBA/EBA solutions stress the importance of engaging with

### Box 1. Community-based natural resource management principles developed from experiences in Southern Africa<sup>11</sup>

1. The unit of production should be the unit of management and benefit.
2. Producer communities should be small enough that all households can participate face-to-face.
3. Community corporate bodies should be accountable to their constituency.
4. Functions should be conducted at the lowest appropriate level.
5. The link between production and benefit should be transparent and immediate.
6. Communities must have full choice in the use of wildlife revenues.
7. All marketing should be open and competitive and done by the wildlife producers themselves.
8. The rate of taxation for wildlife should be similar to that for other resources.
9. Activities or investment should not be undertaken unless they can be managed and sustained locally.
10. Government is the ultimate authority for wildlife, but should accept the principle of subsidiarity.
11. Devolving authority and developing community management capacity is a process
12. Co-management is necessary, especially in the shift from central to community management systems.

institutions operating at the ecosystem and community levels and the surrounding social and administrative structures<sup>21</sup> but stronger consideration of the institutional, governance and policy context in which initiatives lie is needed.

### Widening benefits by scaling up

Scaling up is essential to ensure the benefits from planned adaptation reach the millions of poor people facing a climate change constrained future. CBA and EBA initiatives, many of which are localised project or programme-based activities, must focus more on the broader institutional and governance issues needed to secure impact on a larger scale. Even those initiatives that do work closely with governments lack the multi-sectoral engagement at higher levels needed to maximise impact. Extending beyond the project scale requires embedding activities in an enabling institutional and policy framework that facilitates replication in different contexts. Dialogue and collaboration between different sectors and ministries is also essential.

Community-based natural resource management placed empowered local institutions in a broader

institutional and policy framework that supported devolution of rights and responsibilities to local people when it came to wildlife management. Land ownership was often central to this. This approach provided opportunities for replication and diversification to other sectors.

Mainstreaming local adaptation approaches into local, regional and national government structures, policies, laws and planning processes is usually the best way to support the wide-scale replication of local approaches and achieve impact at scale. However, central government approaches to adaptation planning can be top-down and out of touch with realities on the ground, so care must be taken to retain the direct and genuine involvement of empowered communities.

## Provide incentives

Under community-based natural resource management, communities received long-term non-cash benefits from sustainable resource management, but these less tangible benefits had to be complemented by more visible direct household benefits to incentivise sustainable behaviour. CBA and EBA practitioners should consider such incentives to motivate communities enough to adopt longer-term adaptive practices in the face of uncertain local climate change impacts. Without short-term co-benefits (such as provision of food from EBA interventions) or compensation for short-term losses (including the time and resources spent on adaptation activities), community motivation will be weak.<sup>11</sup>

Community-based natural resource management initiatives sometimes provided short-term

cash-in-hand to local communities, but in the case of local level adaptation activities it is less clear where funding might come from. Potentially, funding could come from schemes involving microfinance, payments for environmental services, or revolving funds. But most international and national systems for financing local adaptation are either absent or in their infancy.

## What next?

The world's poorest people will be worst hit by climate change because they live in vulnerable areas and have the least capacity to cope. Poor people are also disproportionately reliant on natural resources such as timber, fish, grazing and wild medicines. Practitioners in the field of climate change adaptation are therefore increasingly looking to bottom-up nature-based solutions such as CBA and EBA. Solutions must build on learning from older disciplines such as community-based natural resource management, which developed under conditions of climate variability, if not change, and has had 40 years to mature. But they must also look ahead and acknowledge that the environment is no longer static as climate change advances, and in many places people will have to adapt to conditions beyond anything experienced in living memory.

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Many thanks are due to Ed Barrow, Pascal Girot, Shaun Martin, Rob Munroe, Musonda Mumba, Judy Oglethorpe, Jo Phillips, Dilys Roe, Tine Rossing and Ole Vestergaard for comments on earlier drafts of this paper.



## Knowledge Products

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This research was funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the views of the UK Government.



## Notes

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