

## Climate change and poverty reduction

### Key messages

- More variable climates are making it harder for the poor to climb out and stay out of poverty.
- Stronger evidence is required on how climate makes poverty harder to eradicate.
- For development to be climate-resilient, policy instruments to reduce poverty and enable adaptation must be integrated, and designed in a way that includes the climate-vulnerable poor.
- Identifying how mitigation strategies can also reduce poverty and support adaptation is an important part of climate-resilient development.

Climate change will make it increasingly difficult to achieve and sustain development goals. This is largely because climate effects on poverty remain poorly understood, and poverty reduction strategies do not adequately support climate resilience. Ensuring effective development in the face of climate change requires action on six fronts: investing in a stronger climate and poverty evidence base; applying the learning about development effectiveness to how we address adaptation needs; supporting nationally derived, integrated policies and programmes; including the climate-vulnerable poor in developing strategies; and identifying how mitigation strategies can also reduce poverty and enable adaptation.

Climate change and development are inextricably linked. Economic development has contributed to an unsustainable rise in the greenhouse gas emissions that are destabilising the global climate system, and to an inequitable distribution of people's ability to cope with these changes — their 'adaptive capacity'.<sup>1</sup>

There is now a consensus that climate change impacts development too. The world is beginning to acknowledge populations of the climate-vulnerable poor — poor people living in regions that are vulnerable to climate change and who have low adaptive capacity. And there is emerging agreement that climate change will substantially challenge our ability to eradicate poverty over the medium term.<sup>2</sup>

#### Climate challenges to development

The 2007/8 UN Human Development Report<sup>3</sup> provides some evidence of how today's climate and future changes will affect the achievement and sustainability of the 2015 Millennium Development Goals (MDGs).

For example, it presents evidence from across Sub-Saharan Africa of how droughts can have residual effects on the children born into them (see Table 1). These climate-related effects — which are

likely to worsen over the next few years — threaten several MDGs, including those to reduce hunger, improve child health and improve education.

For Africa, meeting some MDGs is already a major challenge — in Sub-Saharan Africa under-five child mortality must be reduced by 37 per cent in the next four years to meet MDG4, where only a nine per cent drop was achieved from 1994 to 2004.

While recognising that climate factors are but one of many that affect the poor, the evidence<sup>3</sup> of their impacts on poverty is striking:

- during the 2002 food crisis in southern Africa, more than half of households in Lesotho and Swaziland reported reduced health spending;
- flooding in eastern Africa in 2007 created new breeding sites for disease vectors such as mosquitoes, triggering epidemics of Rift Valley Fever and increasing levels of malaria; and
- following extreme floods in Ethiopia in 2006, an epidemic of cholera led to widespread loss of life and illness.

But despite the growing evidence of links between climate change and development, the timing and severity of

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# Adaptation is essential to keep development on track.

**Table 1: Residual effects of drought on children in Africa**

Country	Evidence
Ethiopia	Children aged five or less in drought-prone areas are 36 per cent more likely to be malnourished and 41 per cent more likely to be stunted if they are born during a drought year. This translates into some 2 million 'additional' malnourished children.
Zimbabwe	Children born during drought-affected periods are, on average, 2.3 cm shorter. A delayed start of schooling results in a loss of 0.4 years of school life, which leads to a 14 per cent loss of lifetime earnings.
Kenya	Being born in a drought year increases the likelihood of children being malnourished by 50 per cent.
Niger	Children aged two or under who were born during, and affected by, a drought year are 72 per cent more likely to be stunted.

Evidence from the 2007/8 UN Human Development Report<sup>3</sup>

climate change impacts remain uncertain. Neither do we fully understand how these impacts will interact with other drivers of poverty such as growing marginalised populations, volatile markets and political instability.

We must be pre-emptive in developing our understanding of all these issues and invest in a stronger evidence base that can inform policy and practice for reducing poverty.

## Development strategies in adverse climates

Most developing country governments frame their policies and programmes for development within a poverty reduction strategy. These strategies are usually built around achieving four basic 'securities', and establishing governance as an overriding enabler of poverty reduction.

Evidence is starting to emerge on how climate change will affect the different elements of poverty reduction strategies (see Figure).

These impacts all act to impede poverty reduction, particularly in areas with poor adaptive capacity,<sup>3</sup> where they could even tip people back into poverty.

## Adaptation is key

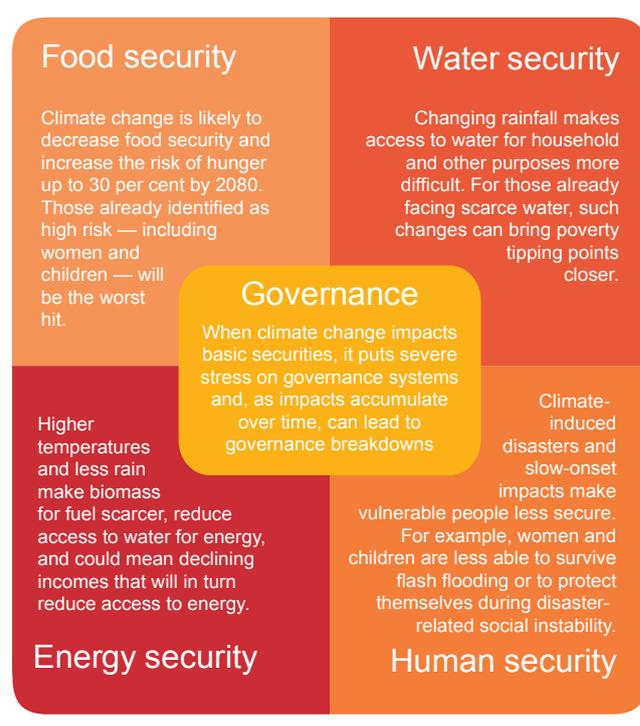
Unless countries and communities can effectively adapt to climate change, reducing poverty will become ever harder and existing adaptation 'deficits' could widen into significant adaptation 'gaps'.

Adaptation is essential to keep development on track. We must put aside the artificial distinction made between adaptation and development in political and negotiating arenas and invest in climate resilience.<sup>4</sup> In particular, we must identify and implement policy instruments that can effectively counter climate change impacts on poverty reduction.

To do this we need evidence-based analysis of what works where and why. Equally important is the need to integrate policy approaches that address development and adaptation (see Box 1). And this needs to happen in a way that allows effectiveness and efficiency gains, takes a programmatic approach and is on-budget to reduce transaction costs. All these are lessons learnt from assessments of aid-effectiveness.<sup>8</sup>

To work, these approaches must not only be integrated but also be inclusive — downwardly accountable and responsive to the needs of the climate-vulnerable poor. This means we

**Figure: Climate change impacts on key elements of poverty reduction strategies**



### Box 1. Integrating adaptation and poverty reduction

The case for 'mainstreaming' adaptation into development planning is well established. Both the Least Developed Countries (LDC) Expert Group of the UN Framework Convention on Climate Change<sup>5</sup> and the OECD Development Assistance Committee<sup>6</sup> point to ways of blending development and adaptation policy and practice.

But an evaluation of the Least Developed Countries Fund in 2009<sup>7</sup> found that most countries have yet to integrate adaptation planning into poverty reduction, except in high-level policy statements. The review found that some experience of integration has been gained in countries such as Bangladesh and Mali, where national priority activities have tried to start adaptation actions to benefit poor and marginalised communities.

must enable open dialogue between those facing climate change induced poverty and those responsible for elaborating and implementing development policies.

#### Achieving climate-resilient poverty reduction

In practice, the instruments that will most effectively achieve climate-resilient poverty reduction will differ across countries and communities, where development and adaptation contexts, vulnerabilities and priorities vary. Country-led processes for developing strategies are therefore crucial.

In 2010, the MDG summit identified priority instruments for accelerating progress on the MDGs.<sup>9</sup> These are entirely compatible with what is required for closing adaptation gaps. They include:

- country-driven, evidence-based planning that couples local priorities to national support;
- policy programmes that are accountable and responsive to local needs and populations;
- inclusive development processes that overcome gender-based and other marginalisation;
- local capabilities to reach up and draw down resources, technologies, information and services — these are important to remove development constraints and increase adaptation options; and
- social protection that mitigates climate-induced and other poverty tipping points, which may include climate-resilient public services, safety nets and social transfers.

Underlying all these options is the need to assess how well, or poorly, the climate-vulnerable poor can adapt to long-term climate change — and what the limits to this adaptation are. For example, smallholder agriculture is often adaptable and can enable labour-intensive agricultural growth. But small farms on less productive land in marginal environments will struggle to adapt, especially where the financial costs of doing so are too high.

Equally important is the need to invest climate finance well.<sup>4</sup> Climate-resilient poverty reduction will not be cheap — making the MDGs in Africa resilient to climate change over the next decade was recently estimated to be 40 per cent more expensive than in a non-climate change affected scenario.<sup>10</sup> Both the architecture of existing climate finance and the national policy frameworks in which climate-resilient development happens must evolve to support the priority instruments above.

#### Going the extra mile: mitigation

While the discussion above focuses on development and adaptation, development agencies and banks are increasingly interested in finding a 'triple win' that also achieves mitigation goals.

In practice, the 'triple win' has remained elusive. Very few Clean Development Mechanism projects have addressed poverty or even been implemented in the poorest countries.<sup>11</sup> The Climate Investment Funds are finding it hard to identify and assess the socio-economic co-benefits of their investments. And renewable energy initiatives — from both nongovernmental organisations and the private sector — have a mixed track record on reaching the poorest (see Box 2).<sup>12</sup> In less developed countries where climate change threatens to exacerbate poverty, pursuing mitigation has so far led to unjustifiably high developmental opportunity costs.

In part, the interest in triple wins stems from a belief that private sector investments will play a large role in lowering emissions and providing adaptation technologies. But economists involved in the Africa Progress Panel have said that the private sector cannot fully match the public investments needed to achieve the MDGs and implement adaptation measures.<sup>10</sup>

There remains an active role for the state in incentivising the

### Box 2. Getting energy to the poorest

Small and medium enterprises that promote low-carbon energy access (LCEA) technologies are serving many people in developing countries, often with a fast-growing share of the market. One review estimates that ten such enterprises in Africa and South Asia have benefited more than seven million people.<sup>10</sup> But the review also found that many LCEA products remain inaccessible to the poor.

How well LCEA technologies reach poor users depends on technology design, mode of use, affordability and delivery models. Being able to access credit, at below commercial rates and terms, is essential. This is often achieved through microfinance institutions backed by soft loans and government subsidies. But even with these strategies the opportunity cost of LCEA technologies that do not offer income-generating prospects is very high for poorer households.

private sector to invest in greener and adaptive technologies that can help mitigate climate change. First, by providing an enabling regulatory framework and sufficient public finance. And second, by including emissions reductions as a specific objective within domestic policy, for example with Nationally Appropriate Mitigation Actions.

Ensuring inclusive development under harsh climate conditions will be difficult and costly. But turning the triple win interest around and identifying how clean technology and renewable energy investments can be designed to deliver the greatest developmental and adaptation outcomes where these are most needed is an important part of climate resilience for development.

## Recommendations

- Climate finance should be used to fund the systematic collection and analysis of evidence on the impacts of climate change on poverty reduction.
- Poverty reduction and adaptation measures should be fully integrated with public services and sectoral development initiatives tailored to maximise adaptation co-benefits.
- Climate finance provision should take on board lessons learnt from aid-effectiveness about the need to align with, and support, national policy development.
- Where climate change threatens development, mitigation actions should only be pursued where there are clear adaptation and poverty reduction co-benefits.
- National development and adaptation policies should be accountable to, and responsive to the local needs of, the climate-vulnerable poor.

## Notes

1. Adaptive capacity refers to the success with which people, organisations and enterprises are able to cope with, overcome and take advantage of the effects of climate change.
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## How can CDKN help developing countries?

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 the country level.



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