

Executive summary

Climate change is a major threat to all aspects of human development. The poorest and most vulnerable communities are already experiencing the impacts of climate change on their lives and livelihoods, and more potentially devastating impacts are inevitable unless action is taken now. In the context of negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) and the need to finalise a global post-2012 deal, Tearfund is advocating for urgent and significantly scaled-up action on climate change adaptation (as well as mitigation) at the local, national and international level.

With our partners, we at Tearfund are developing research on lessons learned from current practice and on the potential for taking an integrated approach to adaptation. Findings from this research will be presented towards the end of this year (2010). This interim report brings together learning and recommendations from extensive existing research on adaptation conducted by Tearfund and our partners across a number of sectors, including disaster risk reduction (DRR), climate change, water resources management, food security and environmental sustainability, and across a number of countries and contexts. These recommendations can be grouped into four broad categories, the four 'I's of adaptation: Integration, Investment, Institutional strengthening, and Information and involvement. This paper will address each in turn. Tearfund believes that donors and governments must support action in these four areas to ensure effective adaptation to climate change.



Recommendations

To ensure effective and sustainable adaptation to climate change at local, national and international levels, Tearfund calls on donors and governments to support the following:

Integration

- Adaptation must be integrated into national and local development plans, and into relevant sectoral policies and strategies (such as water, agriculture, environment, planning, finance and rural development etc). It should not be viewed as a separate 'sector', with separate frameworks, tools and approaches.
- Adaptation to climate change should therefore draw on existing frameworks, tools, approaches and experience from these sectors.

Investment

- Adaptation funding must be new and in addition to Official Development Assistance (ODA) commitments of 0.7 per cent of GDP, and be delivered as grants, not loans. Total finance provided by developed countries for adaptation in developing countries should be at least US\$ 50 billion per year by 2013, rising to at least US\$ 100 billion per year by 2020.
- Strategies for disaster risk reduction, water resources management, food security and environmental sustainability should all feature as high political priorities, with sufficient budgets allocated in national development planning.
- Plans should make allowance for changing livelihoods and cultures as a result of the impacts
 of climate change. Investments should be made in diversifying sources of household income
 and supporting sustainable alternative livelihood strategies to spread the risk posed by
 climate change to the poorest and most vulnerable communities.
- Local adaptive capacity should be strengthened. To develop long-term sustainable adaptation solutions, communities need financial and technical support to help them build on existing coping strategies and plans for managing natural resources, and so reduce the risk of disaster.

Institutional strengthening

- Tackling the intrinsically linked problems of global poverty and climate change requires a more convergent and linked-up approach to development at the national and international level. This should include:
- better coordination between departments within bilateral and multilateral donors, and between UN agencies
- joining up and building on existing adaptive tools, methodologies, technologies and experiences from different sectors, including DRR, water resources management, environmental protection and food security
- coordination and integration between sectors in national development planning and the systematic inclusion of climate risk into sector policies and strategies
- There should be support for decentralising authority and resources to appropriate administrative levels (eg to coordinate and manage water resources and disaster risk reduction). This should include strengthening related institutional, legal and regulatory components, and technical and financial capacity at the local level.

Information and involvement

- Development planning should incorporate climate risk information, and analyses of vulnerabilities and capacities should be collated for all sectors and made available and widely accessible at all levels.
- Donors should support governments to base development planning and policies on climate risk information and analyses in order to:
- have a better understanding of socio-economic and political factors, local realities, access to institutions and why some people in a particular context are vulnerable and less able to adjust their livelihoods while other actors and groups are more resilient

- identify other ways of strengthening people's climate resilience, such as through social protection measures and other forms of livelihood support and asset-building
- Civil society, and the most vulnerable communities, must be given the space to participate in adaptive planning and implementation, in local-level monitoring and in national policy development.
- The focus for adaptation funding and support should be on addressing the needs of the poorest and most vulnerable people.

Written by Jane Cacouris (lead author) and Emily Hard

Glossary

Adaptation: the process by which individuals, communities and countries seek to live with the impacts and consequences of climate change and variability.

Capacity: a combination of strengths, attributes and resources available to an individual or group to anticipate, resist or recover from hazards.

Climate change: any long-term significant change in the climate, caused by nature or human activities.

Climate variability: deviations in the regular fluctuations of the climate, as opposed to long-term climate change trends.

Disaster risk reduction: the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters. These efforts include strategies such as reducing exposure to hazards, lessening vulnerability of people and property, managing land and the environment wisely, and improving preparedness for adverse events.

Hazard: a natural or man-made event which could lead to danger, loss or injury.

Participation: the involvement of people in the decisions and processes that affect them.

Resilience: the capacity to face hazards and continue to function.

Stresses: actions and processes that cause vulnerability.

Sustainable development: the development path along which the maximisation of human well-being for today's generations does not lead to a decline in future well-being.

Sustainability: when the benefits of a project continue without external intervention.

Vulnerability: the state of being susceptible to harm.

Introduction

Climate change is an environmental, economic, energy, social justice and equity issue, which is a major threat to all aspects of human development and to the achievement of the Millennium Development Goals. The poorest and most vulnerable communities are already experiencing the impacts of climate change on their lives and livelihoods, and more potentially devastating impacts are inevitable unless action is taken now.

For more than 1 billion people living in the 100 most vulnerable countries¹ – who are the least responsible for causing climate change – urgent and substantially scaled-up action is critical. This should involve a significant increase in support to enable such countries to adapt to climate change, reduce their vulnerability and build their resilience to the now unavoidable impacts of future climate change.

The following sections examine in turn the four main categories for support that vulnerable countries need to ensure effective adaptation at the local, national and international level.

1. Integration

Tearfund believes that adaptation should not be viewed as a separate 'sector', with separate frameworks, tools and approaches, but as an integral component of sustainable development.²

Tearfund's work on DRR underscores the need to understand the linkages between 'sectors'.³ One priority has been to increase both DRR and climate change communities' awareness and understanding of adaptation and DRR synergies and differences. A lack of coordination between the climate change adaptation and disaster risk management communities will increase administration burdens, prevent efficient use of financial, human and natural resources, and undermine the overall effectiveness of efforts to reduce risk. So joint development of DRR and adaptation strategies is important, and so too is the need for policies and tools to help mainstream adaptation and DRR into national development planning, to ensure policy coherence.

Research on the water sector shows the importance of supporting the establishment of climate risk-based approaches that address both short-term climate variability as well as long-term climate change within water policy frameworks. For this to be viable, it is essential that there is consensus on the need to develop the legal and regulatory structures necessary to support adaptive change.⁴ Adopting these measures is critically important to avoid the creation of water policies and structures which fail to take climate change into account and which cannot quarantee communities sustainable access to water for domestic and agricultural use.

In relation to food security, research in the Sahel region of West Africa found that donors, governments and NGOs had made limited progress in integrating disaster risk reduction into development, relief and recovery policy and practice.⁵ The underlying causes of vulnerability need to be addressed and resilience to economic and climatic shocks strengthened to prevent food crises, reduce their impact and ensure that communities are prepared.

There is currently a lack of donor and UN policy coherence on food security, DRR, climate change, water resources management and environmental sustainability. Donors need to support governments to develop national strategies that incorporate all of these approaches, to prevent the development of parallel efforts and overcome other inefficiencies, including: competing rather than complementary agendas; complicated policy frameworks; missed opportunities for sharing tools, methodologies and approaches; and the waste of financial, human and natural resources. Coordination and coherence need to improve between staff,

the Africa Group.

These countries include the Least Developed Countries, Small Island Developing States and vulnerable countries within

² Tearfund (2007) Adaptation and the post-2012 framework

³ Tearfund (2008) Linking climate change adaptation and disaster risk reduction

⁴ Tearfund (2008) Separate streams

⁵ Tearfund (2007) *Prepare to live*

policies, programmes and departments to ensure a comprehensive and multi-disciplinary approach to tackling these areas. This involves matching the objectives and goals of development strategies and policies with what is required to strengthen adaptive capacities, access to resources and livelihood assets, and the resilience and flexibility of different social groups in adjusting to changes in seasonal patterns and long-term climatic changes. ⁶

Drawing on government perspectives on community-based disaster risk management (CBDRM) in Afghanistan, Burkina Faso, Ethiopia, Malawi, Niger and Zambia, Tearfund acknowledges that governments face competing demands in national developing planning. However, if DRR is integrated into development planning, it can be 'absorbed' within existing development budgeting and can bring cost savings in the longer term. The cost-effectiveness of this approach is further demonstrated when the link between climate change and the increasing frequency and severity of extreme weather events is taken into consideration.

The ultimate aim must be to ensure that adaptation support moves from a project-based approach to a more programmatic one and, where appropriate, adaptation must be fully integrated into national development planning and sectoral plans and strategies. Therefore, National Action Plans for Adaptation (NAPAs) must been seen as a step towards the sustainable implementation of adaptation activities. In view of this, it is important that the following three 'I's – Investment, Institutional strengthening, and Information and involvement – are undertaken with this overarching goal of integration in mind.

2. Investment

Current and predicted impacts of climate change on the poorest and most vulnerable communities demand massively scaled-up investment in adaptation. This need for investment goes beyond just increasing levels of funding, and must also include adequate technical support to strengthen local adaptive capacity to respond to climate change impacts.

2.1 Financial support – international, national and local level

International commitments for adaptation funding must be new and in addition to 0.7 per cent of ODA. Climate change exacerbates existing development problems and is therefore an additional burden on developing countries. The extra investment required for developing countries to adapt to the inevitable impacts of climate change is at least US\$ 50 billion per year by 2013, rising to at least US\$ 100 billion per year by 2020.¹⁰

At a national level, sufficient national budgets for DRR, water resources management, food security and environmental sustainability must go hand-in-hand with the political prioritisation of these 'sectors', if national planning in these areas is to be implemented adequately and sustainably.

Research in Niger showed that pastoral communities are facing water scarcity and are starting to move away from traditional methods of farming to diversify their income streams. Women engage in a wider range of income-generating activities than previously, and often run small shops selling basic goods. Men have become involved in commerce, such as buying and selling animals or commodities and transporting goods, people or livestock to market. Communities have said that they would like access to better information about the climate risks they face and education to develop new skills that will help them seek new income opportunities. ¹¹

⁶ Tearfund, IDS and ACF International (2010) Changing climates, changing lives

⁷ Tearfund (2007) *Turning practice into policy*

⁸ Tearfund (2009) What the world is waiting for: action on adaptation

⁹ Ibid

¹⁰ A wide range of adaptation cost estimates exist in the literature. \$50 billion annually for adaptation is at the low end of the range. UNHDR estimates that \$86 billion a year by 2015 is needed for adaptation in developing countries. The World Bank estimates that \$75–\$100 billion a year is needed between 2010 and 2050. However, these estimates are based on a scenario which keeps global warming within 2 degrees Celsius, a scenario which may not be realised.

¹¹ Tearfund (2008) Separate streams

A separate piece of research showed that reliance on a single source of food is too risky a survival strategy in Niger and northern Burkina Faso, particularly in the context of climate change and extreme weather events. Communities are thus diversifying their efforts to manage the risk. For example, pastoralists engage in farming, farmers engage in herding, herderfarmers expand both activities, and all groups are trading. Discussions with communities and NGOs indicate a number of entry points to improve food insecurity risk management strategies. These include: credit, support for livestock rearing and trading, and access to water. 12

It is imperative that governments plan for current and future change. Governments can address this at the local level in part by investing in household income diversification and alternative livelihood strategies to spread the risk posed to the poorest and most vulnerable communities by climate change impacts. In addition, governments and donors should incorporate contingency plans and budgets into projects and support flexibility in aid responses to climate shocks. Contingency funds allow actors at sub-national levels to respond in more predictable ways to impending shocks and stressors.¹³

2.2 Technical support

Communities have been adapting to climate variability for years and often have the experience and ability to deal with change. However, in many cases they are under-resourced and may require technical as well as financial support to help strengthen their adaptive capacity.

Risk management approaches are commonly top-down in nature; however, they are potentially an important tool for mainstreaming adaptation. If they are to be successful, they must be informed by examples of how households and communities approach vulnerability and their adaptation strategies. A suggested first step is to examine ongoing projects in the fields of natural resources management, DRR and poverty reduction to assess how they can be adapted to withstand the impacts of climate change. Donors and governments should also assess their own potential to support local-level initiatives and partnerships – including through providing direct local-level access to DRR and climate adaptation trust funds and technical resources – ensuring communities' participation in policy development and implementation. A focus on strengthening existing local adaptive capacities and strategies through a range of social and political interventions and through delivering financial and technical resources to the grassroots could represent a move towards a more holistic strategy for adaptation in development planning. Recent research from Mali and Ethiopia shows the value of extending to vulnerable groups social protection, such as cash or food transfers, taking seasonality into account in planning and providing hunger safety nets at critical times of year.

In summary, whether it is financial or technical investment that is needed, adaptation support must focus on responding to the needs of the poorest and most vulnerable members of society, building on and complementing local knowledge and coping practices. This point is further expanded in Section 4.2.

3. Institutional strengthening

Strong government institutions are critical for countries to be able to adapt to climate change, as well as for development. These institutions can be strengthened by: (i) a more convergent and linked-up approach to adaptation, and indeed sustainable development more broadly, at the national and international level; and (ii) support, where appropriate, for the decentralisation of government authority and resources.

3.1 A convergent, more linked-up approach to development

Environmental and developmental issues are intrinsically linked. There needs to be a shift in thinking and practice towards a more convergent approach to these fields.

¹² Tearfund (2007) *Prepare to live*

¹³ Tearfund, IDS and ACF International (2010) Changing climates, changing lives

¹⁴ Tearfund (2008) Linking climate change adaptation and disaster risk reduction

There is a need to link up information, tools, methodologies and experiences from both the climate change adaptation and DRR communities. ¹⁵ Tearfund has identified a number of institutional reasons for the relative lack of coordination between DRR and climate change adaptation. These include:

- The institutional frameworks, political processes, funding mechanisms, information exchange fora etc for the two sectors have developed independently and remain largely separate to date.
- Climate change is often housed in the environmental or meteorology departments of governments. Government departments responsible for poverty and DRR are in some cases aware of vulnerability to extreme climate events, but have no means of coordination.

These points can easily be applied in other sectors. For example, research into the water and climate change sectors at the national level in two developing countries clearly demonstrates the fragmented and isolated nature of government institutions. This showed that there is a need for more linked-up, cross-sectoral approaches to water resources management planning, ensuring integration across land, agricultural, mining sectors etc, and the systematic incorporation of climate risk considerations within these approaches. Realistic first steps towards this include ensuring good communication between ministerial departments and exploiting synergies between sectors as far as possible in policy planning and implementation. Research in Mali and Ethiopia suggests the need to improve linkages and communication flows between early warning departments, food security agencies and safety net programmes, to ensure timely assistance, protection of assets and flexibility to adapt to future change by expanding the size of transfers *per capita* if conditions deteriorate. The establishment of interministerial committees at national government level may also be a practical way to ensure inter-sectoral and multi-stakeholder coordination.

3.2 Decentralisation

When appropriate, decentralisation can be an effective way to tap into successful community-based experiences and hence positively support adaptation, providing there are adequately strong institutions and sufficient technical and financial resources. Effective decentralisation requires a number of core elements, including a guarantee of transfer of political power and adequate budget from the centre to appropriate administrative levels in order to: (i) support local multi-stakeholder partnerships (including equitable representation from the most vulnerable groups), and (ii) coordinate and manage risk reduction, poverty alleviation, development and climate adaptation policy execution. Other important factors include a strong institutional framework; a solid legal and regulatory framework; and technical capacity in local government. Donors and governments should focus on strengthening these elements.

Decentralisation can also improve the management of food insecurity risk, and therefore resilience to climate change, provided that the following elements are in place:

- Early warning and response capacities are decentralised;
- Relief resources and responsibilities are decentralised;
- Decentralised activities to address food insecurity are participative; and
- Governance makes the people directly affected by a hazard the key focus of early warning and assistance.²²

4. Information and involvement

4.1 Access to climate risk information

Climate risk information should be made freely and widely available at regional, national, subnational and local levels. To make this possible, donors and governments must engage more

¹⁸ Tearfund, IDS and ACF International (2010) Changing climates, changing lives

¹⁵ Tearfund (2008) Linking climate change adaptation and disaster risk reduction

¹⁶ Tearfund (2008) *Separate streams*

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¹⁹ Tearfund (2008) Linking climate change adaptation and disaster risk reduction

²⁰ Global Network of Civil Society Organisations for Disaster Risk Reduction (2009) Views from the frontline

²¹ Tearfund (2008) Separate streams

²² Tearfund (2007) *Prepare to live*

actively with the scientific community to ensure that it provides easily accessible and up-to-date climate risk information relevant to the demands of different sectors. A practical first step would be to establish regional research centres that collate information on climate risk from all relevant sources. This information should inform development planning and the creation of robust strategies.

Donors should support governments to base development planning and policies on climate risk information and analyses in order to:

- have a better understanding of socio-economic and political factors, local realities, access to
 institutions and why some people in a particular context are vulnerable and less able to
 adjust their livelihoods while other actors and groups are more resilient
- identify other ways of strengthening people's climate resilience, such as through social protection measures and other forms of livelihood support and asset-building²⁶

There is a need at all levels for increased awareness and understanding of synergies and differences between different 'sectors'. This could be encouraged through systematic dialogue, information exchange and joint working between climate change and disaster reduction bodies, focal points and experts, in collaboration with development policymakers and practitioners.

Climate knowledge generated by specialist national and regional institutions must not be retained for use solely within government, scientific and academic circles.²⁷ Instead, these findings must be translated into comprehensible formats and made accessible to vulnerable communities, to inform their local adaptive strategies. Additional climate risk studies also require funding to ensure that the gaps are filled where climate information is currently lacking.

Equally, local knowledge and information must be harnessed to inform programming and action planning of principal development sectors.²⁸ Options would include maximising the potential of existing traditional social networks, and investigating the potential of social networking and internet-based innovations as approaches to communicating and sharing information.²⁹

Early warning systems are also important. However, unless the fundamental issue of participation is addressed, it is unlikely that these systems will make a significant contribution to reducing vulnerability.³⁰

The absence of participatory risk assessments is a major barrier to developing effective risk management strategies since communities are often not aware of how analysis takes place or know the specific results of the analysis. Therefore, investment is needed to improve the exchange of good practice and learning, promote civil society coordination and foster dialogue and collaboration between state and non-state actors.³¹

4.2 Involvement of civil society

As the previous section intimated, the two-way flow of climate risk information and countries' ability to develop robust development strategies are contingent on the involvement of civil society. Best practice involves the proactive and systematic deepening of engagement with atrisk communities, including the participation of the most vulnerable groups in planning, decision-making, implementation, and monitoring and evaluation. Participation must be clearly defined and explicitly recognised through policy, legal and institutional provisions.³²

²³ Tearfund (2007) Adaptation and the post-2012 framework

²⁴ Tearfund (2008) Separate streams

²⁵ Tearfund (2009) What the world is waiting for: action on adaptation

²⁶ Tearfund, IDS and ACF International (2010) Changing climates, changing lives

²⁷ Tearfund (2008) Separate streams

²⁸ Global Network of Civil Society Organisations for Disaster Risk Reduction (2009) *Views from the frontline* ²⁹ Ibid

³⁰ Tearfund (2007) *Prepare to live*

³¹ Global Network of Civil Society Organisations for Disaster Risk Reduction (2009) Views from the frontline
³² Ibid

Communities should be empowered to engage with local and central governments so they can actively use political systems to help meet their needs. An element of this must be the two-way flow of information between government and communities. The role of governments should be to provide resources to explain and interpret legal issues, clearly map out the responsibility of different political organisations and ensure that communities are informed about opportunities for engagement. Communities and groups should be supported and given the forum to participate directly in political discussions relating to resource rights and management.³³

Civil society should advocate for greater political commitment to and financial support for adaptation from governments and donors. It can provide invaluable insights into the local politics and social changes that affect patterns of vulnerability seen on the ground.³⁴

Governments should reform policies to safeguard and promote the rights and interests of marginalised populations, such as pastoralists and agro-pastoralists, given that adaptation is, to a large extent, a political and social issue. Factors such as wealth and gender are key for deciding who can access resources, other new technologies may not improve resilience unless structural constraints such as labour shortages or gender-based hindrances are addressed at the same time. ³⁵

Tearfund has incorporated these principles into the design of its environmental sustainability programmes. For example, its Environmental Assessment tool (2009) for enabling agencies to understand how a project may harm the environment is conducted with community consultation and participation. It underlines the importance of including the views of women, children and marginalised communities. There are many benefits from involving the local community in the assessment since local people have knowledge about past changes in weather and the environment and will be affected first by any changes that the project makes to the environment.

³³ Tearfund (2008) *Separate streams*

Tearfund, IDS and ACF International (2010) Changing climates, changing lives
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Conclusion

Significantly scaled-up action on adaptation at the local, national and international level is critical to begin to address the current and future impacts of climate change. Adaptation should not be viewed as a separate 'sector', but rather an integral component of sustainable development. A key conclusion is that adaptation must be fully integrated into national development planning and sectoral strategies and plans, and that the other three 'I's – Investment, Institutional strengthening, Information and involvement – must be undertaken with this overarching goal in mind. More effective synthesis can be encouraged through collaborative working and integrated analysis across 'sectors'. In the long term, this will be essential for formulating an integrated response to adaptation, which should build climate resilience and maintain progress towards the Millennium Development Goals.

Recommendations

To ensure effective and sustainable adaptation to climate change at local, national and international levels, Tearfund calls on donors and governments to support the following:

Integration

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Information and involvement

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