

Executive summary and recommendations

Africa – a special case for climate change

Global warming is already affecting Africa.¹ The Intergovernmental Panel on Climate Change (IPCC) predicts that, “the effects of climate change are expected to be greatest in developing countries in terms of loss of life and relative effects on investment and economy.” It describes Africa, the world’s poorest region, as “the continent most vulnerable to the impacts of projected change because widespread poverty limits adaptation capabilities”.²

Small-scale farming provides most of the food produced in Africa, as well as employment for 70 per cent of working people.³ These simple facts, coupled with farming being overwhelmingly dependent on direct rainfall, mean that Africa is exceptionally vulnerable to the uncertainties and weather extremes of global warming.

But a vulnerable agricultural system is not the only problem. The continent is more exposed to the impacts of climate change than many other regions in the world.⁴ Its high sensitivity to climate is exacerbated by other factors such as widespread poverty, recurrent droughts and floods, an immediate daily dependence on natural resources and biodiversity, a heavy disease burden, and the numerous conflicts that have engulfed the continent. There are further complications introduced by an unjust international trade system and the burden of unpayable debt.

All these factors call for a new model of development in which strategies to increase human resilience in the face of climate change and the stability of ecosystems are central. It calls for a new test on every policy and project, in which the key question will be, “Are you increasing or decreasing people’s vulnerability to the climate?”

Above all, the challenge calls for a new flexibility and not a one-size-fits-all, neo-liberal-driven approach to development. As this Report observes, just as an investment portfolio spreads risk by including a variety of stocks and shares, so an agricultural system geared to manage the risks of changing climate requires a rich diversity of approaches in terms of what is grown, and how it is grown.

But, even where the links to climate change are under-appreciated, Africa is a continent only too aware of the threat of ‘natural’ disasters and the obstacles they pose to poverty reduction. Mozambique hit world headlines at the beginning of the new Millennium when it was hit by floods on a biblical scale. Now, its Action Plan for the Reduction of Absolute Poverty 2001–2005 states: “*Natural disasters...*

constitute an obstacle to a definitive break with certain degrees and patterns of poverty. Therefore, measures aimed at managing these risks are of the utmost importance.” More generally, the environment action plan of the New Partnership for Africa’s Development (NEPAD) observes, “*Natural disasters... cause considerable human suffering and economic damage in the continent.*” And quite recently, governments agreed at the World Conference on Disaster Reduction in January 2005 that, “*Disasters in Africa pose a major obstacle to the African continent’s efforts to achieve sustainable development.*”⁵

Unfortunately, even this level of awareness is not the same as having a coherent and adequately funded approach to tackling the problem.

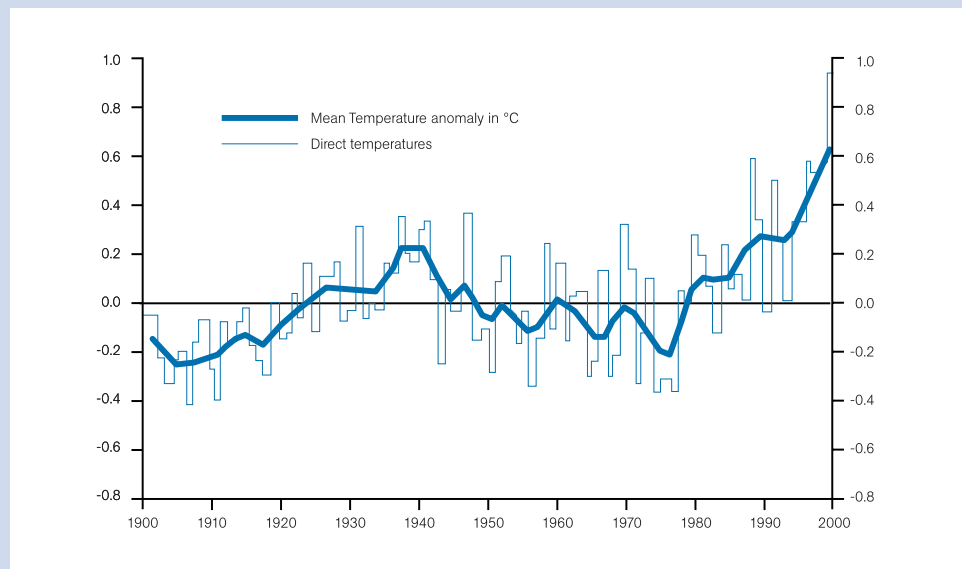
Recently the role of developing new technology has been strongly emphasised. In particular, governments have focused on how to improve weather forecasting in Africa. There is a consensus among development groups, however, that a greater and more urgent challenge is strengthening communities from the bottom-up, and building on their own coping strategies to live with global warming. The need to give much more support to small-scale farming comes up again and again from the field experience of development groups, along with the priority for access to energy from sustainable sources.

We believe it is not necessary to wait years for more research on climate change before investing in disaster risk reduction. Governments have agreed on the need for action, and tools and methods for protecting communities from disasters are well developed. Now they need to be employed immediately in African countries and communities on a much greater scale.

At the moment, spending priorities are perverse. For every \$1 spent on preparing for disaster, a further \$7 is saved in the cost of recovering from it. Yet, as in the case of Mozambique, requests for resources to prepare for disasters before the great floods went seriously under-funded, leaving a huge disaster-relief bill to be paid after the floods.

This Report finds that concerns about the effects of climate change on rural African societies are more than justified. Climate change is happening, and it is affecting livelihoods that depend on the natural environment, which, in Africa, means nearly everyone. However, even without adequate support, far from being passive victims, people recognise even small changes in climate, and are taking steps to respond to them.

Climate predictions⁶ – the past 100 years in Africa



(Source: UNEP/GRID Arendal)

Climate Change is happening and when all the impacts are added up, everyone will lose out sooner or later. Some people will adapt more successfully than others, and climate change may well result in a polarisation of wealth and well-being in ways we have not seen before. Polarisation of wealth can, for example, create an overall drag on human development. In addition to the core recommendations already made by the Working Group on Climate Change and Development, in the light of Africa's special circumstances, these further proposals are considered a minimum needed to manage the impact of global warming on the continent. Without them, whatever achievements in development may have been won in Africa in the last few decades could be reversed by climate change.

Recommendations for Africa:

Increased support for small-scale agriculture:

Dramatically increased support for small-scale agriculture, and an approach to farming based on maximum appropriate diversification. Highly diverse systems, as opposed to commercial monocultures, have been shown time and again to be more resilient – and more productive. Farming based on expensive and energy-intensive artificial inputs will be both vulnerable to fuel price rises and further add to the problem of climate change. Vitaly, small-scale farmers need supporting by a favourable policy environment and supportive research that addresses the problem that they, themselves have identified. Boosting production is crucial, especially

Since 2001, consecutive dry spells in southern Africa have led to serious food shortages. According to the UN Office for the Coordination of Humanitarian Affairs the drought of 2002–03 resulted, in a food deficit of 3.3 million tonnes, with an estimated 14.4 million people in need of assistance.⁷ A half-century-long trend of failing rainfall in Southern Africa is set to continue according to new research from the US-based National Center for Atmospheric Research (NCAR). And it appears that the pattern is closely linked to significant warming of the Indian Ocean, which because it otherwise lacks the natural variability of the Pacific and Atlantic, is reported to be a clear fingerprint of human-caused climate change. “In our models, the Indian Ocean shows very clear and dramatic warming into the future, which means more and more drought for southern Africa,” said Dr. James W. Hurrell, an author of the study. By 2050, the NCAR report indicates that the February-to-April wet season there could suffer a 10 to 20 per cent drying compared to the average for the previous 50 years. And according to Oxford-based academic Dr. Richard Washington, “When the rains fail, people die.”⁸

Africa's coastal area already experiences the environmental problems of coastal erosion, flooding, and subsidence. Exploitation of coastal resources, development and population pressures are all drivers. Climate change is expected to intensify these problems. The IPCC predicts, “Climate change will exacerbate existing physical, ecological/biological, and socio-economic stresses on the African coastal zone.”

- “14 countries in Africa are subject to water stress or water scarcity” and “A further 11 countries will join them in the next 25 years.”⁹ Between 1970 and 1995, Africa experienced a 2.8 times decrease in water availability.¹⁰
- Land areas may warm by as much as 1.6°C over the Sahara and semi-arid regions of southern Africa by 2050.
- In southern Africa and parts of the Horn, rainfall is projected to decline by about 10 per cent by 2050.
- Sea level is projected to rise around 25cm by 2050.
- The west coast of Africa is currently affected by storm surges and is at risk from extreme storm events, erosion and inundation. With climate change, tidal waves and storm surges may increase and inundation could become a major concern. East Africa's coastal zone will also be affected: climatic variation and sea-level rise may decrease coral and patch reefs along the continental shelf, reducing their buffer effects and increasing the likelihood of east coast erosion.

because of the enormous burden of HIV/AIDS, and doing so requires systems that combine new insights and technologies with the wisdom of tradition.

Cut rich country greenhouse gas emissions:

Rich countries need to go far beyond their targets for reducing greenhouse gas emissions, set under the Kyoto Protocol. Instead they need to cut emissions to a level commensurate with halting global warming and so that temperature rise is kept well below 2°C above pre-industrial levels. Commitments to cut emissions should be progressively raised up until 2012 in a way that puts countries on track to cuts of between 60 and 80 per cent by 2050. In this light, G8 countries should establish a robust policy framework for long-term future action on climate change post 2012. All G8 countries should commit to achieving caps on emissions at a national level, that are compatible with a fair a global solution that is rooted in human equality and capable of stopping dangerous climate change.

Focus on local needs first:

Africa needs to be freed from a one-size-fits-all development approach. Effective responses to climate change will differ everywhere depending on local circumstances, so a new flexibility is needed. The greatest challenge is securing livelihoods at the local level.

Map likely health impacts:

Where health is concerned the challenge to the international community is to help map the complex impacts of global warming, and ensure that both the resources are available to tackle them, and that the development policy framework does not make things worse. For example, as climate change puts stress on scarce water resources, a dogmatic approach to water privatisation could easily increase the vulnerability of millions of people in Africa.

Help Africa leapfrog 'dirty development':

The exploitation of fossil fuels in Africa does little for the development or security of its people. But the potential for sustainable and renewable energy on the continent is enormous, and the market, especially in poor communities, is huge. To meet people's need for energy, improve health at the household level, and to help Africa leapfrog 'dirty development', international donors and financial institutions should switch investment from fossil fuels into promoting access to renewable and sustainable energy, remove obstacles to technology transfer, and adopt targets and timetables to achieve those objectives.

Support community coping strategies:

Global warming presents a huge challenge to the coherence and coordination of aid. For example, donors are focusing strongly on the role of technology. But our experience tells us that promoting disaster reduction at the local level by supporting community coping strategies, is far more effective and yields

immediate benefits that stretch beyond just tackling climate-driven disasters. Later on in this Report, we make several detailed recommendations on how to do this. The integration of disaster risk reduction in relief, reconstruction, development programming and poverty reduction plans should now be a priority. In our experience 'good adaptation' also makes 'good development'.

Release aid quickly and set targets for local and regional procurement:

More efficient systems are needed to ensure that aid is released quickly and that humanitarian aid is well targeted when disasters strike. To ensure the long-term development benefits of money spent on disasters, there should be targets for local and regional procurement set for governments and agencies. This would help prevent the leakage of relief money from affected communities.

Implement existing agreements on environment and development:

The international community specifically should implement the agreement made at the World Summit on Sustainable Development (WSSD) to help Africa prepare for, and mitigate disasters at both a community and national level. This should include, as agreed at the WSSD, promoting "...community-based disaster management planning by local authorities, including through training activities and raising public awareness".

Test whether initiatives are climate proof and climate friendly:

All policies and programmes should face the test of whether they will leave people in Africa more or less vulnerable to the effects of global warming. The test will be: Is this climate friendly and climate proof? At the very latest, in line with the recommendation of the Commission for Africa, climate change should be 'mainstreamed' within development policies, planning and activities by 2008.

New and additional funding:

All funding to help Africa adapt to global warming should be new and additional to existing funds, and seen not as aid but as an obligation of the rich countries who created the problem.

The Up in Smoke Agenda

Up in Smoke?, the first report of the Working Group on Climate Change and Development, joined the environment and development communities in a united view on the minimum action necessary to deal with the threat of global warming to human development. This is what it called for in October 2004. If anything, the proposals are even more pressing now than they were before.

The environmental and development community, like the rest of humanity, is faced with three overarching challenges:

- 1 How to stop and reverse further global warming.
- 2 How to live with the degree of global warming that cannot be stopped.

- 3 How to design a new model for human progress and development that is *climate proof* and *climate friendly* and gives everyone a fair share of the natural resources on which we all depend.

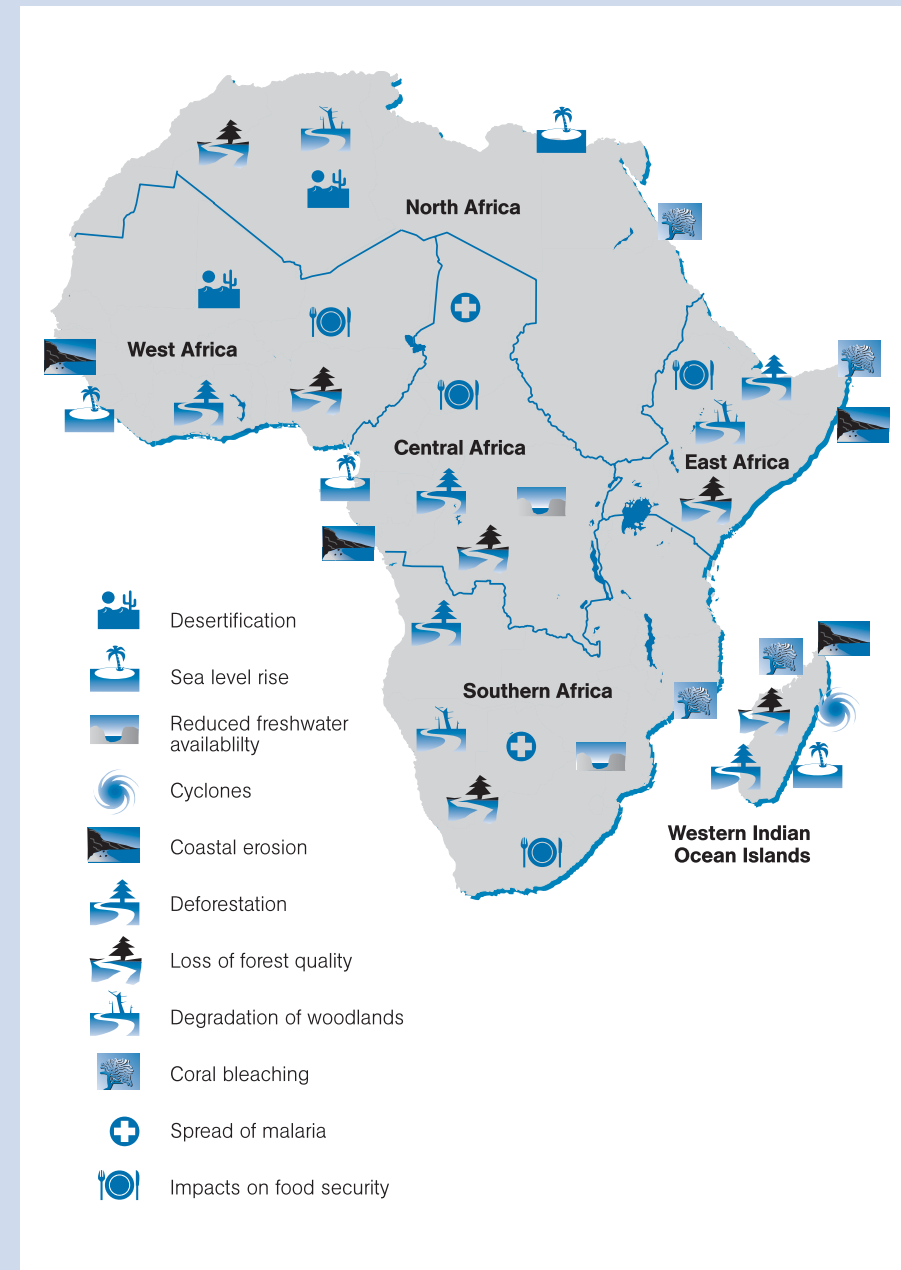
In that light, urgent priorities include:

- A global risk assessment of the likely costs of adaptation to climate change in poor countries.
- Commensurate new funds and other resources made available by industrialised countries for poor country adaptation, bearing in mind that rich country subsidies to their domestic, fossil-fuel industries stood at \$73 billion per year in the late 1990s.
- Effective and efficient arrangements to respond to the increasing burden of climate-related disaster relief.
- Development models based on risk reduction, incorporating community-driven coping strategies in adaptation and disaster preparedness.
- Disaster awareness campaigns with materials produced at community level and made available in local languages.
- Co-ordinated plans, from local to international levels, for relocating threatened communities with appropriate political, legal, and financial resources.

In addition to these, as organisations striving to improve human well-being in the face of enormous challenges, we will:

- Work toward a collective understanding of the threat.
- Share the best of our knowledge about how to build human and ecosystem resilience and live with the degree of global warming that is now unstoppable.
- Do everything in our power to stop dangerous climate change and help bring about a global solution that is fair and rooted in human equality.

Climate change vulnerability in Africa



(Sources: UNEP/GRID Arendal/Anna Balance, 2002)