

AWF CLIMATE CHANGE STRATEGY

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SUMMARY

Climate change stands to be the greatest challenge humanity will face in the coming generation, and is predicted to become the biggest single driver of biodiversity loss over the next 50–100 years, bigger than loss of habitat, over-exploitation, and introduction of invasive species. While Africa contributes the least to climate change through CO₂ emissions, it is believed to be the most vulnerable to its consequences because of expansive aridity, the emphasis on natural resource-based development, high levels and prevalence of poverty, and limited resources available to cope with impacts.

The African Wildlife Foundation (AWF) is an international conservation organization working solely on the African continent. AWF's mission is to work together with the people of Africa to ensure that the wildlife and wild lands of Africa endure forever. AWF acknowledges the severity and complexity of climate change and has identified six priority areas of work.

1. Improve understanding and monitoring of climate change impact on Africa's wildlife, habitats and people.

AWF is working to increase understanding of likely climatic impact and adaptive strategies across Africa. AWF supports the integration of climate-induced risk assessment and scenario planning with water and soil conservation and reforestation, and identifying 'climate proofing' measures for wildlife corridors and affected communities.

2. Help communities adapt to the impact of climate change and promote landscape scale adaptation.

AWF believes that large conservation landscapes, such as African Heartlands, offer the best opportunities for adaptation. AWF supports ecosystem-based adaptation and community-based adaptation across its programs in Africa. AWF is working with communities across Africa to enable them to adapt to the impacts of climate change. This includes water catchment methods, fuel efficient technologies, solar power, dry-land agriculture, land use planning and alternative livelihood programs.

3. Mitigate terrestrial carbon emissions by encouraging landscape scale conservation, sound forest management and rangeland rehabilitation through appropriate carbon payment mechanisms.

AWF believes that avoided deforestation and degradation and other measures to ensure terrestrial carbon sequestration play a significant role in climate change mitigation.

AWF supports the formalization of a global carbon market, that is: transparent; equitable in payment and pricing; and provides rewards to countries that prioritize conservation and social benefits with carbon credit sales. AWF sees the rapidly growing voluntary carbon market as a good potential source of funding for climate mitigation work.

4. Help African countries gain access to clean and efficient technologies.

AWF supports African efforts to leap over inefficient technologies and embrace newer, fuel efficient technologies including efficient stoves, solar power, biogas and wireless communications to reduce the carbon-intensity of development.

5. Provide training and capacity to African countries to deal with climate change.

AWF is working to build the capacity of local and government partners to undertake vulnerability assessments, adopt ecosystem-based adaptation approaches, participate in forest carbon markets and strengthen policy.

6. Help ensure financing mechanisms create the right incentives.

Significant investment is needed in climate change mitigation, adaptation and monitoring in Africa. AWF encourages those designing the financing mechanisms to ensure they adequately encourage sustainable ecosystem function, reward sound conservation practice, ensure funding is available for implementation at the landscape level and deliver equitable benefits to local people.

1. OVERVIEW

This strategy paper outlines the African Wildlife Foundation's Climate Change Program in sub-Saharan Africa. AWF is working to reduce carbon emissions (mitigation), support wildlife and human adaptation to ameliorate the negative impacts of climate change, and strengthen monitoring and understanding of biodiversity-climate change linkages in Africa.

The African Wildlife Foundation addresses climate change, biodiversity conservation and livelihoods in order to help human and biological systems cope with climate change-related stresses and enable ecosystems to contribute to climate change mitigation. AWF recognises the urgent need to tackle the underlying causes of climate change in parallel with dealing with its consequences.

growing focus on REDD may reduce pressure on northern countries to set and achieve ambitious carbon reduction targets at home.

The rapid development of official and voluntary carbon markets in Europe and the US has created a new framework for financing carbon emission reduction, with a growing interest in finding mechanisms that can finance projects in Africa. Because 'natural' carbon is currently excluded from the Kyoto Protocol's Clean Development Mechanism (CDM) and recognizing the high costs of compliance and lengthy timeframes associated with many official CDM-compliant carbon schemes, many conservation organizations, such as AWF, are pursuing certification through the voluntary carbon market, such as the Voluntary Carbon Standard (VCS) and the Climate, Community and Biodiversity Project Design Standards (CCB). Important to note for these mechanisms is the integration of biodiversity and social impact assessment, but also have fairly high costs of compliance (certification is done through international private sector companies) which therefore excludes small, local schemes.

2.3 Climate Change Impact

Due to its expansive aridity, the emphasis on natural resource-based development, and the limited resources available to cope with impacts, the African continent is believed to be the most vulnerable to the consequences of climate change. Yet predictive climate change models for Africa suffer from having limited background data on existing climate variability and relationships to social and ecological vulnerability, and therefore are less confident as to where and who will be most affected. This is an important constraint to the development of appropriate adaptation strategies.

According to the Millennium Ecosystem Assessment predictions, climate change will be the biggest single driver of terrestrial biodiversity loss over the next 50–100 years, bigger than loss of habitat, over-exploitation, and introduction of invasive species. It is projected that in Africa 25%–42% of plant species will lose their habitat by 2085 and 10–40% of mammals will fall within the critically endangered or extinct categories by 2080. Climate change will alter species habitats, forcing attempts to shift ranges and migration patterns. Some species will be unable to evolve or shift their range quickly enough to persist; others will decline in number significantly. Temperature rises will be associated with increased climate volatility, including more frequent extreme conditions such as droughts and floods. Competition for natural resources between humans and wildlife will accelerate.

In Africa, climate modellers predict that the direct impacts on biological systems will include rapid changes to: hydrologic regimes; altered precipitation patterns; more rapid desertification; sea level rise yielding increased coastal erosion; and the dramatic



disappearance of glaciers. Indirect impacts will include: freshwater stress and scarcity; saline water movement inland; and coral bleaching. An elevated sea level is expected to swamp many coastal areas in low-lying countries, and, in the process flooding once fertile agricultural fields and displacing people. Already salt-water contamination during the dry season has been observed 80km upstream of the Zambezi River and up to 120km upstream of the Gambia River. The likely scale of impact of all these changes on ecosystems and the human populations they support will be monumental.

Climate change-driven impacts on biological systems will pose major threats to livelihoods in Africa, and will affect the poor disproportionately. People will be impacted directly by a growing number and frequency of extreme events including floods, droughts and storms, as well as by the negative impacts of biodiversity losses and degraded ecosystem services. Large segments of the population will face increased food insecurity, growing livelihood vulnerability (especially for those dependent on agriculture) and growing risk of disease. As many lack the resources to adapt to these stresses, the consequences will be dire. The loss of species and biodiversity will have dramatic impacts on key economic sectors including agriculture, fisheries and tourism. Some southern African countries are projected to suffer reductions in agricultural yield of up to 50% with small scale farms hit hardest. Pastoralism, as practiced across two-fifths of Africa's land mass and broadly compatible with sustainable resource management, will be hit hard by desertification, prolonged droughts, and increased competition for resources.

3. THE AWF RESPONSE STRATEGY

AWF recognizes that it has a significant role to play in supporting and developing an African-led response to climate change. In addition to spearheading carbon emission reductions in conservation work through reduced fossil fuel consumption, adoption of new technologies, reforestation and prevention of land degradation and deforestation, AWF is supporting ecosystem-based adaptation to climate change impacts, and improved understanding and monitoring of climate change at the ecosystem level.

1. Improve understanding and monitoring of climate change in AWF Heartlands

Preliminary data collection and GIS mapping is underway to assess impact of climate change on biodiversity and ecosystem function in AWF Heartlands using primary and secondary data. The AWF PIMA (Performance and Impact Assessment) monitoring system tracks climate change agents such as deforestation, fire, and broad changes in vegetation cover. However, available information is frustratingly unclear as to likely rainfall and temperature scenarios across Africa, particularly at sub-national level. AWF is encouraging a scaling up of African-led research into climate change vulnerability and impacts to help guide future climate change responses. One example of AWF's work in this area is the 2010 assessment of the vulnerability of the mountain gorilla, its habitat and local livelihoods in the Virunga Heartland to anticipated climate change scenarios for that ecosystem. AWF aims to replicate this in other Heartlands.

2. Promote livelihoods adaptation and ecosystem-based adaptation

AWF believes that enabling ecosystems and local human populations to adapt to climate change across landscapes is going to be AWF's most challenging and important area of work over the coming decade. AWF's priority is to enable and encourage pro-poor and pro-conservation adaptation – of resource management, resource use and livelihoods. Ongoing work in the Maringa Lopori Wamba Heartland in the Congo Basin includes the creation of the new Lomako Forest Reserve with local and national support to protect the forest and the species in it, and a riverine agricultural trade project with support for improved farming in designated areas across the landscape to reduce slash and burn. The protection of wildlife dispersal areas in Kilimanjaro, creation of a community conservancy in Kazungula Heartland, and support for improved grazing management regimes across pastoralist areas of eastern African Heartlands are examples of AWF adaptation interventions at ecosystem scale.

3. Mitigate terrestrial carbon emissions by encouraging landscape scale conservation, sound forest management and rangeland rehabilitation

AWF believes that avoided deforestation and degradation and other measures to ensure terrestrial carbon sequestration play a significant role in climate change mitigation, and supports the formalization of a global carbon market. AWF is working on a series of pilot VCS and CCB compliant projects to support 'avoided deforestation' and integrate carbon, biodiversity and livelihoods targets. These pilot activities currently include the Mbirikani Community project in southern Kenya, a national REDD pilot project in Tanzania, and a carbon offset project in DR Congo. AWF aims to significantly scale up and expand this work.

4. Help African countries gain access to clean and efficient technologies

AWF aims to support African efforts to leap over inefficient technologies and embrace newer, fuel efficient technologies including efficient stoves, solar power, biogas and wireless communications to reduce the carbon-intensity of development. AWF is working with partners at landscape level to pilot and replicate these approaches, and at policy level to encourage their uptake. AWF offices follow an agreed 'Environmental Code of Practice' that addresses actions to improve the environmental performance of AWF and its partners in Africa in terms of energy consumption and sourcing.

5. Provide training and capacity to African countries to deal with climate change

AWF is working to build the capacity of local and government partners to adopt ecosystem-based adaptation approaches, participate in forest carbon markets and adopt fuel efficient technologies. AWF has conducted REDD training at community and government level and produced educational documents on REDD the voluntary carbon market, and adaptation.

6. Get the financing mechanisms right

Significant investment is needed in climate change mitigation, adaptation and monitoring in Africa. AWF is participating in dialogue with those designing the financing mechanisms to ensure they adequately encourage sustainable ecosystem functions, reward sound conservation practices and deliver equitable benefits to local people. AWF is working to ensure that adequate funding reaches communities so that they can develop mitigation and adaptation measures.

While AWF has made great strides in its Climate Change Program, much more needs to be done. AWF works with a vast diversity of partners and welcomes additional support and partnerships.