ENVIRONMENT AND CLIMATE CHANGE

Land, water, forests and fishing form the bases of income and subsistence for a large proportion of Africa’s population, and natural resources constitute a principal source of national wealth all over the continent. Sweden’s support to regional cooperation in the field of environment and climate change aims at improving regional and national organisations’ capacity to sustainably use shared natural resources, to meet climate change challenges, to promote growth and to reduce poverty.

CHALLENGES AND OPPORTUNITIES

Economic growth and poverty reduction in sub-Saharan Africa are dependent on the efficient use of its natural resources. Today, less than 5% of agricultural land is irrigated and only some 10% of potential hydroelectric generating power is developed. Cooperation between countries is often essential in order to tap this huge potential. For example, 70% of Africa’s population live in transboundary river catchment areas, and most of Africa’s major rivers are shared between two or more countries.

The majority of people in Africa are still directly reliant on their farms and natural resources for their survival. Lack of other sources of income forces people living in poverty to utilise marginal ecosystems and resources. Farmers cut trees for fuel wood and to gain more space to plant crops or graze livestock. Logging, and in some cases illegal export, also contribute to deforestation making three million hectares of forest cover disappear from Africa every year, with negative effects on carbon and water cycles. So one key challenge is to ensure sustainable management of ecosystems for long-term gains, while balancing the short-term needs of poorer groups of people. In this context one concern is weak governance systems concerning environmental issues in Africa. The absence of strategic environmental assessments and accountability systems leads to unsustainable resource use.

Climate change is projected to increase the intensity and frequency of extreme weather and natural disasters. As a result, people living in poverty in developing countries are likely to become even more vulnerable than they are today. This applies particularly to people in rural areas who are directly dependent on natural resources for their living. Impact of climate change may also intensify competition for, and conflict over, scarce resources such as fresh water and arable land, especially in the context of continued population growth. Moreover, oceans are becoming more acidic and heating up which negatively affects the marine ecosystems and fishing sector.

Through regional cooperation:

- Environmental legislation can be strengthened and harmonised between countries to improve protection of shared natural resources and ecosystems.
- Joint action can be undertaken to adapt to climate change.
- Potential conflicts and competing demands for shared resources can be prevented or managed.
- Information exchange between countries can reduce the impact of flooding through early-warning systems.
- Joint investments (in hydroelectric power, for example) can promote growth, reduce poverty and increase regional integration.
and practitioners at local level in responsible and pro-
poor forest governance that will benefit local citizens
and enable them to access funds from global adaptation
and mitigation funds such as REDD+. The AFF has, with
Swedish support, become a centre of expertise, providing
important advice for African governments in international
negotiations on climate change, forestry and desertifi-
cation. AFF’s collaboration with SADC and the private
sector has led to new initiatives for sustainable use of
timber resources, better forest law enforcement and the
reduction of illegal trade (the FLEGT Programme).

Transboundary Water Resources
Africa counts more than 60 trans-boundary rivers that are
shared by at least two countries. For many years Sweden
has been an active partner in supporting trans-boundary
management of international waters, including the Nile,
Zambezi, Okavango, Pungwe, Niger, Mono and Volta riv-
ers. This support is aimed at the establishment of com-
petent institutions with improved capacity to carry out
their mandates through e.g. flood and drought manage-
ment, improved stakeholder involvement and studies to
support development-oriented investments benefitting
local populations. These mechanisms for inter-state
cooperation are also important for the prevention of
conflicts at various levels.

Fifteen years ago, despite the Nile River Basin crossing
the boundaries of ten countries, there was almost no
cooperation for joint planning of the River’s develop-
ment. Today, the Nile Basin Initiative has established an
intergovernmental mechanism to manage these water
resources, identify problems and make joint decisions.
Advanced systems have been developed to improve
decision-makers’ understanding of the economic, social
and environmental consequences of different types of
investments, such as hydroelectric power or irrigation.
Exchange of hydrological information is used to warn

SWEDEN’S REGIONAL COOPERATION
Current Swedish contributions are guided by the Strategy
for Regional Development Cooperation with sub-Saharan
Africa for 2010-2015, established by the Swedish Govern-
ment. This strategy identifies the following priority areas
for support in the field of environment and climate
change:
• Equitable and sustainable use and protection of
ecosystems and natural resources.
• Transboundary management of water resources
(oceans and fresh water systems).
• Sustainable food security.
• Climate change adaptation and mitigation.

Total support for regional cooperation for 2010-2015 is
approximately SEK 2.9 billion of which environment and
climate change receives about 30% or SEK 890 million. In
addition there is financing for regional research coopera-
tion into the environment which amounts to around SEK
550 million for the same period.

Sweden mainly cooperates with African actors and
supports their agendas. Swedish financing for regional
activities under the environment sector is, to a large
text, directed towards the capacity development of
intergovernmental organisations such as the African
Union, regional economic communities and river basin
organisations. Sweden also supports civil society
organisations, regional research institutions, think
tanks, regional professional associations and UN
organisations.

Ecosystems and natural resources
In the forest sector, Swedish cooperation with the Re-
 sponsive Forest Governance Initiative (RFGI) and African
Forest Forum (AFF) aims at building up expertise in the
area of responsible and sustainable forest governance.
RFGI is an initiative that trains in-country researchers
and practitioners at local level in responsible and pro-
poor forest governance that will benefit local citizens
and enable them to access funds from global adaptation
and mitigation funds such as REDD+. The AFF has, with
Swedish support, become a centre of expertise, providing
important advice for African governments in international
negotiations on climate change, forestry and desertifi-
cation. AFF’s collaboration with SADC and the private
sector has led to new initiatives for sustainable use of
timber resources, better forest law enforcement and the
reduction of illegal trade (the FLEGT Programme).
Reform Strategy for Fisheries and Aquaculture in Africa, agreed by African Ministers in 2014. This constitutes the platform for continued efforts in the fishing sector to create equitable, social and economic development in Africa.

The FAo/nEPAD partnership has also resulted in specific technical outputs, such as a draft regional Management Plan for Lake Chad, which represents the first application of the ecosystem approach to the fishing of inland waters in Africa, integrating gender aspects as well as climate issues and the impact of disasters.

Food security
Food security is supported through different approaches and initiatives, such as capacity development for conserving and utilising plant genetic resources and for scaling up conservation agriculture using trees. Support is also provided for enhanced water storage and use for agricultural production, and for responsible fishing and aquaculture.

One interesting result in the area of food security and climate change adaptation is the establishment of the African Risk Capacity (ArC), which is a continental insurance mechanism for extreme weather events - mainly droughts and floods. An important function given that the number of droughts in Africa is expected to increase. The ArC Technical Secretariat is located within the African Union and reinsurance is carried out by a special insurance company. In order to become a member, each country pays an insurance premium and must also present an action plan to be used in possible disaster situations. ArC reduces long term dependence on foreign aid, strengthens domestic capacity to analyse meteorological data, and means that populations in trouble receive help more rapidly.

In the Lake Victoria Region Swedish support has enabled the five countries who share this basin to reach an agreement on harmonized regional standards for industrial and municipal effluent discharges into the lake. As a consequence, some 80 industries have adopted cleaner production technologies – reducing the pollution released into Lake Victoria by 60%.

Oceans, costs and fishery
Collaboration with UNEP on marine conventions for the western and eastern African oceans (the Abidjan and Nairobi Conventions respectively), has enhanced awareness of the importance of sustainable management of marine and coastal environments. These conventions have come to constitute important platforms for cooperation in the blue economy, enabling countries to reach agreement on common priorities and challenges – such as the need to protect ecosystems for fishery and tourism while reducing the negative impact of oil and gas exploration. Sweden’s long term support for the Western Indian Ocean Marine Sciences Association (WIOMSA), the regional research council, has contributed to increased capacity for forecasting climate change in marine and coastal environments, and the consequences for coral reefs and mangrove systems, for example.

In terms of fishing and aquaculture, Sweden supports a collaborative effort between FAo and the technical arm of the African Union (nEPAD), also involving other regional organisations, NGOs and countries. One tangible result of this programme is the Policy Framework and

Reform Strategy for Fisheries and Aquaculture in Africa, agreed by African Ministers in 2014. This constitutes the platform for continued efforts in the fishing sector to create equitable, social and economic development in Africa. The FAo/nEPAD partnership has also resulted in specific technical outputs, such as a draft Regional Management Plan for Lake Chad, which represents the first application of the ecosystem approach to the fishing of inland waters in Africa, integrating gender aspects as well as climate issues and the impact of disasters.

Food security
Food security is supported through different approaches and initiatives, such as capacity development for conserving and utilising plant genetic resources and for scaling up conservation agriculture using trees. Support is also provided for enhanced water storage and use for agricultural production, and for responsible fishing and aquaculture.

One interesting result in the area of food security and climate change adaptation is the establishment of the African Risk Capacity (ArC), which is a continental insurance mechanism for extreme weather events - mainly droughts and floods. An important function given that the number of droughts in Africa is expected to increase. The ArC Technical Secretariat is located within the African Union and reinsurance is carried out by a special insurance company. In order to become a member, each country pays an insurance premium and must also present an action plan to be used in possible disaster situations. ArC reduces long term dependence on foreign aid, strengthens domestic capacity to analyse meteorological data, and means that populations in trouble receive help more rapidly.

The Bio-resources Innovations Network for Eastern Africa Development (Bio-Innovate) Programme supports regional competitive bioscience innovations in the agriculture and environment areas, bringing together the
public and private sectors. Successful innovations include energy generation from waste treatment and the development of drought-resistant crops, enhancing food security and resilience to climate change.

**Climate Change**

Swedish regional cooperation addresses several aspects of climate change. Climate adaptation is supported through sustainable management of transboundary waters and ecosystem services, construction of dams for water storage and irrigation plus the establishment of systems for exchange of water-related data and early warning mechanisms to reduce disaster risk.

Climate change mitigation is addressed through capacity building for improved forest governance and reduction of emissions from deforestation. Swedish support to regional power markets and trade in Southern Africa has contributed to increased investments in green energy and energy savings of 4,500 MW, the equivalent to more than five times Tanzania’s total installed capacity for energy production.

Other contributions have strengthened the negotiating power of African countries in international climate change negotiations. Cooperation with the African Union Commission, the UN Economic Commission for Africa and the African Development Bank in the sizeable ClimDev Programme has contributed to well-articulated African positions in negotiations, and to an increasingly scientifically-based dynamic African climate change policy dialogue.

Cooperation with the civil society organisation Pan-African Climate Justice Alliance (PACJA), that represents more than 1,000 organisations in 45 African countries, has enabled the consolidated voice of African civil society to be heard in international negotiation processes.