



African Mountains: Water Towers in need of Attention



Policy brief

Introduction

Mountains cover 25% of the world's land surface, and are home to about 10% of its population, most of whom depend on mountain resources for their livelihoods. A key link between the actions of mountain and wider populations is that most of the world's major rivers rise in mountain areas: **mountains are the world's 'water towers'**, and the sustainable management of their watersheds is vital for the provision of high-quality water to billions of people, as well as for ensuring that the risks of natural hazards, such as floods and landslides, are minimized.

During the World Summit on Sustainable Development in Johannesburg (2002), a Type-II Partnership "The International Partnership for Sustainable Development in Mountain Regions" (known as The Mountain Partnership), was established, with essential support from the governments of Italy and Switzerland, UNEP, and FAO, the UN Lead Agency for mountains and where the Mountain Partnership Secretariat is based. As a Type-II Partnership, the Mountain Partnership is a voluntary trans-national alliance between governments, intergovernmental organizations, civil society and private organizations to collaborate to meet specific goals.

Approximately half of Africa's countries have mountains higher than 2000m, with mountains above 4500m being concentrated to the north-western, central and eastern regions. Those mountains cover an estimated 3 million km² of surface area and ensure life-supporting goods and services for millions of people by providing water, food and energy security at the local, national, and regional levels.

The mountains are linked to and directly support the lowlands. Low-lying arid areas in countries such as Sudan, Egypt and Namibia receive water from the mountainous sources of large rivers including the Nile, Niger, Senegal, Congo, Tana, Zambezi and Orange rivers. Several countries in West Africa depend on water resources from the Fouta Djallon Highlands. In East Africa, Mount Kenya is the only source of freshwater for more than seven million people. In Southern Africa, the Drakensberg mountains supply the

majority of water to the entire sub-region. Hydropower is the main source of clean energy in most mountainous areas of Africa. The consistent flow of water from mountains is essential for this clean energy. In a continent highly dependent on traditional energy sources and badly affected by rising oil prices, mountains can thus significantly contribute to energy security. The conditions in mountain regions allow for higher and better quality yields, significantly contributing to regional and lowland food security.

Mountains house many ecosystems such as forests, grasslands, drylands, rivers and wetlands. The Fynbos Biome in South Africa is home to 6,200 endemic plant species, and Mt. Mlanje, the Rwenzori Mountains, Mt. Cameroon, the Fouta Djallon and the Ethiopian highlands all have high levels of endemic species. Over 50% of African birds, 39% of mammals, 19% of amphibians and 14% of reptiles are found in the Albertine Rift region. The mountain biomes often provide refugia for species in areas where other habitats have been destroyed. This biodiversity is the basic source for future Mountains are fragile ecosystems and prone to several threats resulting increasingly from climate change as observed in most mountain ecosystems around the world and particularly in Africa. Climate change has significant implications particularly for mountain environments as well as the people that depend on them. In mountain ecosystems, temperature increases are associated with changes in rainfall and snowfall patterns, and may influence the frequency of extreme events such as soil erosion and floods, landslides and fires. Montane forests are globally recognised for their biological importance in terms of species diversity resulting from the glacial periods. They also play a key role for ecosystem services, community livelihoods and national economies and provide various ecological processes. However, the impact of climate change on montane forest ecosystems is already significant with species shift as well as adverse agricultural responses, changes in seasonal runoff; severe vector-borne diseases; increased risks of severe tropical weather disturbances, including storms; and extreme temperature and rainfall events continent.



Policy Context

In 1992, the heads of state or government of most of the world's nations at the UN Conference on Environment and Development (UNCED or 'Rio Earth Summit') signed a plan for action, 'Agenda 21'. Chapter 13 is entitled 'Managing Fragile Ecosystems: Sustainable Mountain Development'.

Twenty years later at the UN Conference on Sustainable Development (UNCSD), Rio de Janeiro, Brazil, June 2012, mountains and their communities received renewed global political attention and three paragraphs (210, 211, 212) of the UNCSD's Outcome Document entitled the "Future We Want" are entirely dedicated to mountains:

- 210. *We recognize that the benefits derived from mountain regions are essential for sustainable development. Mountain ecosystems play a crucial role in providing water resources to a large portion of the world's population; fragile mountain ecosystems are particularly vulnerable to the adverse impacts of climate change, deforestation and forest degradation, land use change, land degradation and natural disasters; and mountain glaciers around the world are retreating and getting thinner, with increasing impacts on the environment and human well-being.*
- 211. *We further recognize that mountains are often home to communities, including indigenous peoples and local communities, who have developed sustainable uses of mountain resources. These communities are, however, often marginalized, and we therefore stress that continued effort will be required to address poverty, food security and nutrition, social exclusion and environmental degradation in these areas. We invite States to strengthen cooperative action with effective involvement and sharing of experience of all relevant stakeholders, by strengthening existing arrangements, agreements and centres of excellence for sustainable mountain development, as well as exploring new arrangements and agreements, as appropriate.*
- 212. *We call for greater efforts towards the conservation of mountain ecosystems, including their biodiversity. We encourage States to adopt a long-term vision and holistic approaches, including through incorporating mountain-specific policies into national sustainable development strategies, which could include, inter alia, poverty reduction plans and programmes for mountain areas, particularly in developing countries. In this regard, we call for international support for sustainable mountain development in developing countries.*

Other Multilateral Environmental Agreements such as the Convention on Biological Diversity and the Convention on Wetlands (Ramsar, Iran, 1971) recognize the biological, hydrological, cultural and socio-economic importance of mountain ecosystems and call for appropriate and timely actions to improving the awareness and understanding of their functions and values.



From the peak of high mountains to remaining patchy montane forests, African mountains play an important role for national economy and local community livelihoods.

A specific outcome of the UN General Assembly, in 1998, was the declaration that 2002 would be the **International Year of Mountains**. Since then, the International Mountain Day has been celebrated on the **11th December of each year**, with many activities recognising the diverse values of mountains and the importance of Sustainable Mountain Development taking place worldwide. The theme for this year's International Mountains Day (i.e. 11th December 2013) is: **"Mountains - Key to a Sustainable Future"**. The Albertine Rift Conservation Society (ARCOS), in collaboration with the Mountain Partnership members in Africa, is organising a poster competition. The objective of the competition is to raise awareness of sustainable mountain development and to reflect this year's theme in an African context (see www.arcosnetwork.org for more details).

Africa Mountain Partnership

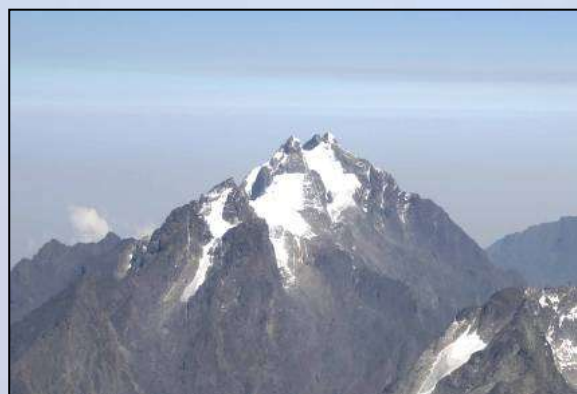
The Mountain Partnership (MP) is a self-governed voluntary association that is open for membership by governments and inter-governmental, civil society, and private organizations that are actively engaged in and committed to achieving Sustainable Mountain Development. The members of the MP envisage a world with increasing public and private sector commitment, engagement, and investments in sustainable mountain development (SMD) that significantly improve the social and economic well-being and livelihoods of people. The list of MP Members in Africa (as of October 2013) is provided below. The Africa Mountain Partnership Champions Committee was established during the Africa Mountain Partnership Members Meeting in Kigali in February 2013, with the aim to revitalise the activities of the MP in the African region. ARCOS Network hosts the Africa MP Secretariat. Cameroon currently holds the Chairmanship. Cameroon and ARCOS represent the Africa Mountain Partnership in the Global Mountain Partnership Steering Committee.

Governments	Major Groups Organisations
<ul style="list-style-type: none"> • Algeria • Cameroon • Democratic Republic of Congo • Ethiopia • Ghana • Guinea • Kenya • Lesotho • Madagascar • Morocco • Uganda 	<ul style="list-style-type: none"> • African Conservation Foundation • Akwapin Mountain Women's Forum (Ghana) • Albertine Rift Conservation Society (Uganda) • Association pour la Protection des Montagnes du Burundi • Cameroon National Network of Association and NGOs of the Mountain Partnership (Cameroon) • Environment and Tourism Support (Nigeria) • Ghana Wildlife Society (Ghana) • International Development Research Centre (IDRC) • International Council for Game and Wildlife Conservation • International Union for the Conservation of Nature (IUCN) • Makerere University (Uganda) • Nile Basin Society • Soraine Uganda • Volunteers for Africa/ECODECO Partnership • Wonderland Development Organisation • World Wide Fund for Nature (WWF)
Intergovernmental Organisations	
<ul style="list-style-type: none"> • African Ministerial Conference on the Environment (AMCEN) • International Livestock Research Institute (ILRI) • Food and Agriculture Organisation • United Nations Environment Programme 	

African Mountain Partnership Members have recently increased their efforts to promote sustainable mountain development agenda.

- A regional Meeting on Sustainable Mountain Development in African Mountains was held in November 2011 in Mbale, Uganda.
- The African Ministerial Conference on the Environment (AMCEN) met in Arusha, Tanzania, in September 2012 at the 14th session in relation to Africa's post Rio+20 Strategy for Sustainable Development. The Arusha Declaration on Africa's post Rio+20 Strategy for Sustainable Development makes reference to mountains in Africa, paragraph 27, as follows:

"To request the United Nations Environment Programme, in collaboration with member states and partners, to support, with financial and technical assistance, through North-South and South-South cooperation, the implementation of the agreed decision under the Rio+20 Conference regarding mountains in Africa";



- The Africa Mountain Partnership Members meeting was held in Kigali, February 2013, organized by the Albertine Rift Conservation Society, in collaboration with IUCN, UNEP and the MPS and launched a special initiative on mountains as African Water Towers;
- A Regional Conference on African Mountain Ecosystems as Impacted by Climate Change: post RiO+20 Actions was organized by UNEP, UNESCO and FAO in Nairobi, 9 & 10 September 2013

Plan of Action for the Mountain Partnership in Africa



The members of Africa MP have identified six priority areas of action to promote sustainable mountain development in Africa and the Africa Water Towers Initiative:

- Information Sharing, Networking and Membership Mobilisation: Revive the Africa MP membership and raise the mountain agenda in African policy processes and globally.
- Research and Knowledge: Making information and knowledge available and shared, to deepen the links between science and decision making process, and share practices and knowledge;
- Advocacy/Policy: Provide African governments, institutions and professionals with the tools and requisite case studies on mountain

sustainable development;

- Community Livelihoods and Sustainable Benefits from Ecosystem Services: Support community based organisations working in mountain ecosystems and supporting activities that enhance sustainable benefits from mountain ecosystem services to communities;
- Capacity Building: Special attention to be given particularly on climate change mitigation strategies, promotion of renewable energy technologies and sustainable benefits from ecosystem services.
- Private Sector Involvement: Engage dialogue and participation of private sector in the Mountain Partnership and promote corporate social and environmental responsibility in mountain ecosystems.



Recommendations for further Action

The African Mountain Partnership Members,

Recalling the fundamental importance mountain ecosystems as recognised by Chapter 13 of Agenda 21 “Managing Fragile Ecosystems – Sustainable Mountain Development”, the Plan of Implementation of the World Summit on Sustainable Development and the decisions of the United Nations Conference on Sustainable Development, Rio de Janeiro, 2012 and the outcome document: “The Future We Want”;

Aware of the growing threats posed to mountain environments and communities by global change;

Appreciating efforts made by governments, the civil society, the private sector and local communities for the protection of the remaining mountain ecosystems and promoting sustainable development in African mountains;

We call for doubled efforts to advance sustainable mountain development in African mountains and in particular:



1. We invite African States, relevant UN bodies, regional organisations and other interested parties to ensure that mountains are included and considered in applicable national and international processes.
2. We urge governments to recognise the importance of an ecosystem based conservation approach, maintaining connectivity of remaining ecosystems, including protected areas and corridors in and between mountain landscapes.
3. We call for special support for capacity building, research, community adaptation strategies to enhance climate change resilience in fragile mountain ecosystems.
4. We encourage the establishment of National Committees in the Mountain Partnership member countries in Africa to catalyse the

mountain agenda at a national level, and strengthening partnerships in transboundary mountain ecosystems.

5. We urge development partners to make resource available to support mountain communities and research involving a full range of stakeholders and governance arrangements to ensure the continued security and supply of ecosystem services.



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