

Why mountains matter for Africa



African mountains are highly vulnerable water towers and breadbaskets for the lowlands. Mountain ecosystem services (ES) ensure water-food-energy security and biodiversity conservation and enable sustainable development and poverty eradication at the continent level.

In the uncertainty created by climate change, high population growth and land-use change, urgent policy action is needed to promote the enabling conditions for funding and investment in sustainable mountain development (SMD) in Africa.

How African mountains contribute to sustainable development

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.

African mountains are water towers. In a continent dominated by arid and semi-arid areas, water supply greatly depends on the rivers originating in mountain areas. 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. 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 supplies the majority of water to the entire sub-continent.

Hydropower is the main source of clean energy in East Africa and is also important in West Africa and Southern Africa. In a continent highly dependent on traditional energy sources and badly affected by rising oil prices, mountains can thus significantly contribute to energy 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, Rwenzori, Mt. Cameroon, the Fouta Djallon and the Ethiopian highlands have centres of high endemism as well. This biodiversity is the basic source for future food, agro-diversity, medicine and tourism development.

African mountains have intensive land-use with more than 33 persons per km² – and as high as 500 people per km² in some areas – compared with less than 15 persons per km² in the lowlands. Yet mountains directly support the lowlands. In tropical and sub-tropical Africa, mountains have favourable environmental conditions and resources, in contrast to the generally much dryer surrounding lowlands. By ensuring higher and better quality yields, mountains are important breadbaskets significantly contributing to regional and lowland food security.

The flow of ES from mountains to lowlands is essential to promote sustainable development and poverty eradication throughout the continent.



PietMarietsburg, Kwazulu, South Africa (AfroMont)

Policy action for African mountains – and the future we want



Tea plantations near Kericho, Western Kenya (Johannes Refisch)

The sustainability of ES in African mountains is at great risk. First, poverty and environmental degradation threaten the integrity of mountain ES. This is aggravated by population growth, land-use conflicts and political insecurity. Second, the effects of climate change are most noticeable in mountains, requiring local populations to adapt to new conditions.

A lack of sufficient enabling conditions for funding and investment in SMD-related initiatives is a major obstacle to the promotion of water-food-energy security and biodiversity conservation.

Urgent policy action is required at the regional and sub-regional levels to advance the mountain agenda for Africa and create a constituency to support it in a systematic, integrated and coordinated manner. Fora such as the African Ministerial Conference on the Environment (AMCEN) and regional inter-governmental organisations are best placed to endorse this process.

Actions include

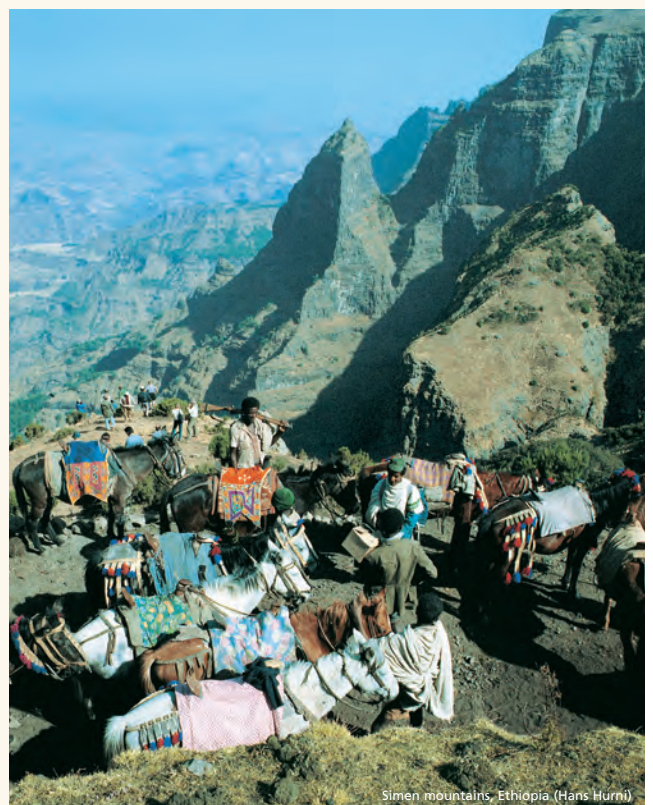
- Community-based and high-level consultation and planning towards options for the setup of an African Mountain Hub, a specialised platform for building knowledge and capacity, establishing standardised research methods, sharing information, and promoting awareness, communication and advocacy;
- Development of tools and guidelines for ES evaluation, ecosystem-based adaptation (EBA) approaches, and early-warning systems (e.g. National Environmental Observatories).

At the national and local levels, efforts should be directed towards mainstreaming SMD-related issues in development and strategic planning agendas, and recognising mountain communities as equal partners in the policy and decision-making process.

Actions include

- Innovative mountain-specific policies and institutional regulatory and governance models, tailored to the diverse mountain regions and the specific processes of sustainable development. Taking into account community-based models for conservation, these actions should balance the interests of highland and lowland societies;
- Investments in value chains and value-added products and services (e.g. climate smart agriculture, agroforestry products, renewable energy, eco-tourism);
- Implementation of market-based mechanisms for financing and compensation.

Policy action at all levels requires strategic public-private partnerships, multi-sectoral planning and transboundary cooperation that takes into account key highland-lowland linkages.



Simen mountains, Ethiopia (Hans Hurni)