TRI work in Kilimanjaro Landscape Tanzania

Overview of the landscape

The Kilimanjaro landscape is a transboundary wildlife-rich area in the northern Tanzania which harbours a number of charismatic wildlife species including African elephant, buffalo, wildebeest, zebra Thompson's gazelle, Grant's gazelle, giraffe, lesser Kudu, striped hyena and several carnivore species. The landscape consists of several protected and non-protected areas including Arusha National Park, and Kilimanjaro National Park (a World heritage site), NARCO livestock ranch, the Ndarakwai wildlife ranch and the Enduimet wildlife management area, plus two potential wildlife corridors; Kisimiri (that links Arusha National Park to West Kilimanjaro area) and Kitendeni (that links Kilimanjaro National Park to the Amboseli basin in Kenya), and community lands. The landscape features international importance as it harbours Mount Kilimanjaro which is the highest in African and highest free-standing mountain in the world, and also contain transboundary freshwater lakes Chala and Jipe, straddling the boundary between Kenya and Tanzania. The Kilimanjaro landscape is an upland-lowland system. In the uplands there are among other mountainous Arusha and Kilimanjaro national parks which serve as important water towers for the lowland areas. The lowlands are essentially dry lands under irrigation farming, livestock keeping and wildlife conservation activities, which largely depend on the water draining from the parks mainly through Ngarenanyuki and Simba Rivers. To meet social-economic needs, of the rapidly growing human population, there is currently excessive abstraction of surface water both within the parks and in the upland villages, a situation that is leading to deprivation and/or scarcity of dry season water especially in the lowlands and thus developing into a serious water crisis. Included in the crisis are human-human conflicts, human-wildlife conflicts and loss of biodiversity all of which jeopardise sustainable development. The landscape is also prone to climate change impacts as temperature keep rising and rainfall variability increases.

TRI aims to effort to address these challenges through research, community education and awareness, providing tangible solutions to alleviate existing water crisis to improve community livelihood and conserve the environment.

In this direction, TRI has been involved in carrying our assessment on ecological impacts of water-abstraction and changes in surface water availability. This involves determining the status of water quantity and quality, related changes on animals abundance and distribution, and changes in vegetation.

TRI is taking a landscape conservation approach and intends to empower the communities to initiate and own solutions to address environmental problems in their landscape. Strategies include building community awareness and strengthening local institutions to ensure conservation and wise use of natural resources (water, biodiversity and lands)

Inline to this, TRI also plans to collaborate with other stakeholders in supporting and building capacity of the communities in the landscape to initiate and implement feasible and tangible solutions to the existing water crisis through various means including planting of trees in the catchments and construction of water dams/holes in the arid lowlands for domestic, livestock and wild animal use.

A view of the Kilimanjaro landscape

Livestock scrambling for drinking water in the arid lowlands of the Kilimanjaro landscape

Water scarcity in the wildife and livestock dry lowlands