

# Banko Janakari

A journal of forestry information for Nepal

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## Biodiversity Conservation

Nepal is rich in biological diversity (biodiversity) due to its varied climate and altitudinal ranges within short interval distance. Nepal comprises only about 0.1 percent of the terrestrial area of the earth but it harbors high share of biodiversity. A total of 118 ecosystems with 75 vegetation types and 35 forest types. Nepal has a global commitment to the Nepali people and its government for biodiversity conservation and sustainable development within broad framework of Convention on Biological Diversity (CBD). So, it is very crucial to conserve nature gifted biological resources to maintain diverse ecosystem of Nepal. Nepal has made lots of efforts to conserve biodiversity and in this regards, Nepal Biodiversity Strategy (NBS), 2002 and Nepal Biodiversity Strategy Implementation Plan (NBSIP), 2006 have also been prepared.

The NBS defines biodiversity as species diversity, ecological diversity and genetic diversity. The biological diversity in Nepal is closely linked to the livelihoods improvement, economic development, agricultural/ forest productivity and ecological sustainability. Furthermore, it relates to human health and nutrition, indigenous knowledge, gender equity, building materials, water resources, and the aesthetic and cultural well being of the society.

Conserving biodiversity cannot be achieved successfully under single sector approach. It needs proper co-ordination and co-operation from multi sectors and cross sectors whereby several cross sectoral issues can be addressed.

The paradigm of conservation of biological resources in Nepal is shifting from species level to ecosystem level and finally to landscape level. This effort of landscape level conservation is being carried out in some parts, especially focusing on Protected Areas, of the nation only. However, most of the forests such as community forest, leasehold forest, national forest, private forest still have not received much concern about biodiversity conservation.

There is a need of effective implementation of the Nepal Biodiversity Strategy in all sectors for the protection and wise use of the biologically diverse resources of the country, the protection of ecological processes and systems, and the equitable sharing of all ensuing benefits on a sustainable basis.

At present context, climate change and its impacts on environment as a whole is a burning issue. The impacts on biodiversity due to climate change need to be addressed to conserve biodiversity. There are biodiversity hotspots which are vulnerable to climate change because they are rich in endemic species with restricted distribution. If we talk about species level conservation, which species will be lost if climate change takes place?

Biodiversity conservation in situ contribute towards carbon sequestration which could be another benefit through carbon financing on one hand while carbon financing mechanism that conserve forest and promote sustainable land use could have a adverse impact on biodiversity conservation on other hand.

The rich biodiversity of the country has to be conserved by proper implementation of Nepal Biodiversity Strategy Implementation Plan, and a high priority must be given for conservation and sustainable forest management. Research in forests and flora, scientific forest management for conservation of biodiversity are areas of research for conservation of biodiversity. The focus on species level conservation should also be given at least for key stone species at present context.