

ProCEED
Promotion of Climate-related Environmental Education

ProCEED is a Lao-German development cooperation project implemented by the Lao Ministry of Natural Resources and Environment (MoNRE) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

The project aims at improving knowledge, attitudes and practices regarding environmental and biodiversity protection as well as climate change adaptation in Laos.

CONTACT

ProCEED – Promotion of Climate-related Environmental Education
Department of Environmental Quality Promotion
Ministry of Natural Resources and Environment
Nahaidiau Rd, Ban Nahaidiau, Chanthabouly District
Vientiane Capital, Lao PDR

T +856 21 254 011
E proceed@giz.de
I www.laos-proceed.com



7 Biodiversity is in danger



In the past 30 years alone, the population size and habitats of known species have been cut in half worldwide. An estimated 26,000 species become extinct every year. The loss of species has an impact on people's food security and health situation as, for example, pollination or medicinal plants may be affected. In Laos, 60 mammal and 74 bird species have been classified as threatened or nearly threatened. Plants are hardly monitored at all. Biodiversity losses have greatly increased in Laos due to the destruction of habitats caused by unsustainable use of resources, and agricultural expansion.

8 Biodiversity loss is attributed to human activities



Loss of biodiversity has negative impacts for the country's economic growth and rural livelihoods. The main reasons for biodiversity loss in Laos are economic in nature: over-exploitation of timber, illegal logging, expansion of agricultural areas and mono-cultures, unsustainable slash-and-burn, hunting and fishing practices or illegal trade of wildlife. Social causes play a role as insecure land rights or unequal distribution of land result in agricultural lands expanding into protected areas. Structural poverty leads to unsustainable resource use. Moreover, there are environmental causes like floods, droughts and landslides.

9 Laos has a framework in place to protect biodiversity



Lao PDR has signed the Convention on Biological Diversity, a legally binding international treaty. Consequently, the government developed a National Biodiversity Strategy and Action Plan in 2004 that aims at maintaining the country's biodiversity as a key to poverty alleviation. Laos has already designated more areas for protection than is the global target for 2020. Laws were put in place that integrate the conservation of biodiversity in various sectors. However, law enforcement as well as coordinated strategy and policy implementation take effect in limited areas only due to a lack in capacities and resources.

10 Biodiversity can be conserved



In order to maintain biological diversity and intact ecosystems for future generations, natural resources need to be used sustainably. Environmental conservation incorporates the protection of natural resources to ensure their long-term survival. At the government level, programs, standards and regulations can establish a framework for sustainable economic resource use. Land management and National Protected Areas can support the conservation of landscapes and habitats. Raising awareness about the need for environmental protection also lets individuals, civil society or the private sector play a role in this process.

ProCEED
Promotion of Climate-related Environmental Education

10 FACTS

ON BIODIVERSITY CONSERVATION IN LAO PDR

A Lao-German cooperation project

1

Biodiversity means the variety of all forms of life



Biological diversity means the variety of forms of life – plants, animals, organisms and their ecosystems which range from forests, grasslands and croplands to rivers, lakes and oceans. Biodiversity incorporates the complex system of relationships between different species, and how they interact with each other. Humans are part of these links. People depend on biologically diverse and functioning ecosystem for their own survival and livelihood. About 1.8 million species have been identified to date, but biologists estimate that our planet is home to anywhere between three and 100 million species.

2

Laos is rich in biodiversity



Laos has numerous landscapes, ranging from mountainous areas to lowland plains. These ecosystems vary in climate, soils and natural resources, and provide habitats for numerous plants and animals. There are 700 bird, 90 bat and 500 fish species in Laos, 166 species of reptiles and amphibians, and more than 247 species of mammals. Three mammal species can only be found in Laos and Vietnam: giant flying squirrels, goat-like saolas and Laotian rock rats. Laos also has 8,000 – 11,000 species of flowering plants and one of the greatest pools of glutinous rice varieties in Asia.

3

Human beings depend on ecosystem products



All people depend on biologically diverse ecosystems and the products they provide, particularly food and water. In Laos, non-timber forest products such as medicinal plants, wild fruits, bamboo shoots, and vegetables contribute to food security and are often the main source of livelihood for rural communities. House construction and handicraft production rely on natural materials like bamboo, rattan or paper mulberry. Agricultural and forest resources have a high commercial value. Timber, minerals and hydropower energy are vital economic resources that contribute to the country's development and growth.

4

Ecosystem services rich in biodiversity regulate life on earth



Biodiversity in ecosystems is the planet's life support system. Many biological, chemical and physical processes in nature reproduce life on earth. Ecosystem services range from water or air purification and waste decomposition to flood, pest and disease control. For example, water purification provides access to clean water. Disease regulation contributes to human health and wellbeing. Plant reproduction is only possible because of pollen being transferred between plants and trees by insects, bees and bats. This is vital for agricultural production.

5

Ecosystems also have a cultural value



In Laos, many ethnic groups are attached to beliefs, taboos and local traditions rooted in a profound respect for nature and its resources. For example, most villages in Laos have a sanctified forest used as burial ground or set aside as a refuge for spirits. Sacred forests and other natural sites have a spiritual value worth protecting against ever increasing demand for land. Ecosystems also have a high recreational value associated with enjoyable and healthy outdoor activities or eco-tourism for income generation. Their educational meaning is often inherited in ethnic communities' traditional knowledge.

6

The Lao economy depends on natural resources



Ecosystem products such as non-timber forest products account for about half of the cash income of rural households in Laos. Small-scale economic activities such as agriculture, fishponds and aquaculture are based on natural resources. Wood products and hydropower energy as the country's top exports generate gross national income and economic growth. Eco-tourism potentials tapping the diversity of ecosystems in Laos are gradually developing. Hence, biodiversity is the main source of wealth for the country. Maintaining and sustainably using its natural assets will safeguard Laos' environmental and economic stability.