



Promoting Agroforestry for Climate Change Adaptation

EcoHimal's projects in Nepal, Bhutan and Kyrgyzstan

Kurt Luger
*UNESCO Lehrstuhl für
Kulturelles Erbe und Tourismus*



PARIS
LODRON
UNIVERSITÄT
SALZBURG



Climate change is having a massive negative impact on the lives of farmers in the Himalayas. Heavy rainfall, drought and water scarcity threaten subsistence farming.

The rhythm of Himalayan villages, which is based on the agricultural cycle and the corresponding festivals and ritual conventions, is becoming increasingly disrupted. The most negative aspect is the exodus of thousands of mountain dwellers who, due to declining crop yields, no longer see any way of feeding their families.





EcoHimal has been working with farmers in the remote mountain regions of the Himalayas and Hindu Kush since 1992. The aim is to enable people to live self-determined lives in harmony with nature.

Sitting under the tree – EcoHimal's model for development cooperation



Sitting together with the locals to identify problems, establishing village cooperatives, drawing up development plans and structuring the work, creating training programs for skills development, implementing the necessary measures with local people.



Transformative education and income generation - Sustainability as a guiding principle



In total, over the last 10 years, we have trained over 60,000 people – three quarters of whom are women – in hundreds of training sessions lasting several days, teaching them methods of climate-resilient agroforestry. Through the lead farmer principle, we are achieving three times as much and reaching even the most remote hamlets.



The EcoHimal approach
An integrated development policy with
interlinked measures and components to
achieve maximum impact.



EcoHimal operates a network of agroforestry centres in several provinces, where training is provided, seedlings are distributed to the population and high-quality seeds are also sold. In the long term, these centres will be self-sustaining.



All training courses take place in the field, with knowledge being put into practice immediately.





The first biointensive plantings are carried out. A multilayered tree planting system is being pursued as an appropriate method because it contributes to soil conservation and biological diversity. The aim is to produce organic agricultural products.



Agroforestry involves growing crops on three levels – at ground level, vegetables, cardamom or cereals, for example; at mid-level, vine tomatoes and coffee; and at the top, fruit and fodder trees form a canopy that provides shade.



This way, several harvests are possible in the course of a year, minimising dependency on the yield of a single planting. This is an adaptation to the noticeable climate and weather change in the Himalayas, which poses a major threat to subsistence farmers.



Increasing diversity: New on the menu
and at the market – Kiwis from the
Himalayas



Areas that cannot be used for agriculture are reforested with conifers. This not only helps to bind CO₂, but also to stabilise the soil.



The need for such stabilising measures is demonstrated by the damage caused by earthquakes. The project not only promotes the fully organic cultivation of vegetables and cereals, but also the restoration of soils through reforestation and planting.



The focus on high-quality crops makes agroforestry an extremely effective tool for improving livelihoods. This is particularly true in very remote project areas.



The farmers have developed their own vegetable gardens, refrain from using pesticides and achieve astonishing yields. *Ja natürlich, alles Bio!*



Agroforestry produces clean food and also contributes to the health system. Surpluses are marketed – establishing supply chains is a laborious process. After a few years, the first successes become apparent and farmers earn cash income that strengthens their livelihoods.



Cardamom and Szechuan pepper from the Himalayas are high-quality spices that are mostly marketed through Indian intermediaries. We work together with cooperatives and have established a direct trade connection to Europe.

Example of fair spice trade: the Farming for Health Cooperative, a non-profit limited company founded by EcoHimal, trades directly with Wiberg Spices and Lufthansa.





The formation and strengthening of cardamom cooperatives makes farmers less dependent on Indian middlemen, who otherwise determine market prices.



In the cardamom and pepper villages, modest homestay tourism is developing as an additional source of income, similar to farm holidays in the Alps.



The promotion of lead farmers and women's groups, training in land and water management, terrace cultivation and business management are also central components of the project in the far east of Bhutan. In addition, glass and polyhouses are being further developed as local agroforestry resource centres.



Water is a growing problem in all project regions – both in terms of guaranteeing clean drinking water and irrigating fields. The climate crisis is causing increasingly unpredictable seasons and rainfall patterns, with monsoons either being too heavy or too light, both of which place an enormous strain on agriculture.



The same applies to Kyrgyzstan, where we have introduced agroforestry in the southern border region with Tajikistan, a semi-arid region. Women are the key players in this project and they are doing an excellent job.



The Kyrgyz consultant for climate-resilient agroforestry studied at the University of Natural Resources and Life Sciences in Austria and leads the training courses on site.



The first greenhouse in Kara Bak



Tree grafting to generate more resistant plants



The introduction of new techniques enabled better harvests and trade in surplus production. Thanks to the training courses, competitive organic products can now be produced. 20,000 families benefit from this.



Participation is the key to success – unity creates energy.

The local population is actively involved in the planning and implementation of all project steps from the outset.

