

Physical Security



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Farmer's managed apiary – an example of backyard beekeeping in far-western Nepal benefiting adjoining areas of natural forest

The link between beekeeping development and the physical security of societies and communities may not seem immediately obvious, but it does exist and is based on the pollination services that bees provide. As with all pollinators, bees both from managed apiaries and the wild play an important role in combating soil degradation by enhancing the replenishment cycle: more pollination, more seed sets, more plants, more biomass returned to the soil (Ahmad et al. 2003), leading to less soil erosion, less flooding, and a more conducive environment for sustainable living.

Pristine areas play a pivotal role in maintaining the replenishment cycle by conserving and absorbing water,



Apis laboriosa nest after harvesting (honeycomb) in Kaski district of Nepal

obstructing and regulating flash-floods, disseminating important plant and weed seeds for regeneration, and providing a habitat for a large number of plants and animal species. Wild and feral bees (domestic bees that have escaped to the wild) play an important role in pollinating flowering plants in pristine areas, hence increasing the vitality and viability of these physically secure environments.

The Himalayan cliff bee *Apis laboriosa* is one of the most important pollinators in high altitude pristine areas of the Himalayas. It nests at high altitudes and can fly long distances at heights where many lowland birds and insects have difficulty breathing. This bee not only pollinates a significant number of plant species at high altitude, it also provides food for the local fauna. Monkeys feed on bee brood; wasps, hornets and some bird species eat bees; bears are known to have a soft spot for honey; and lizards also eat fallen bees.